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System Setup 6

The software installation section above has explained how to copy all necessary files to your computer's hard disk. The final step of the installation procedure is to set up the installed printer driver software and the SC7000 in order to meet the special requirements of your configuration.

6.1 Apple Macintosh and Compatible Computers

6.1.1 Printer Driver

6.1.1.1 Printer Selection

Before you begin to set up the SC7000 printer driver, select the SC7000 as your current PostScript printer:

Select the **Chooser**, located in the Apple Menu. Click the PSPrinter icon to select the SC7000 printer driver. Select the **AppleTalk Zone** where the SC7000 resides.

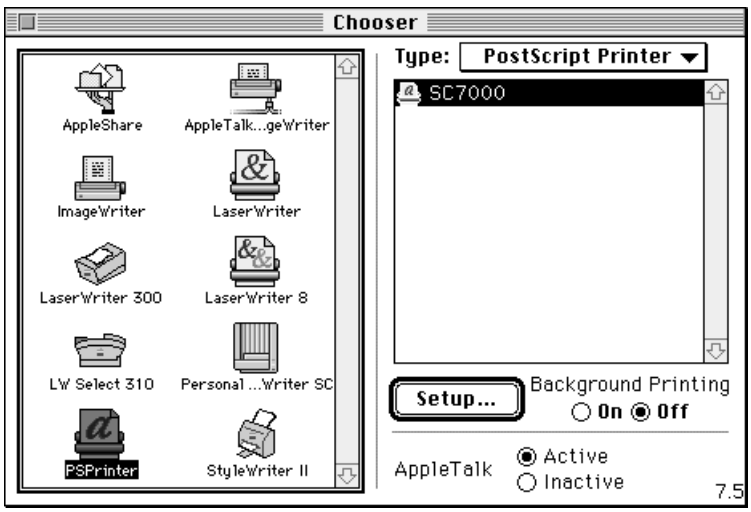

Figure 6.1: Chooser (Macintosh compatible)

The **AppleTalk Zone** depends on your particular network configuration. If there is more than one logical **AppleTalk Zone** in the physical zone where the SC7000 resides, you may want to assign a particular logical zone to the SC7000. See the description of the SC7000 utility software below on details how to do this.

Select SC7000 from the list of **PostScript Printers**. If the SC7000 has just been switched on, there may be some delay until the SC7000 appears in the list.

If your SC7000 is currently not connected to the network and you want to print to a file, choose **Virtual Printer** from the **Type** pull-down menu. In all other cases, select **PostScript Printer** from the **Type** menu.

Note that the SC7000 does not bear an icon in the list of PostScript printers. This indicates that the printer driver has not yet been set up for a specific printer. Even if the icon is visible, always make sure that the driver's settings for cylinder and sorter match the physical setup of your RISOGRAPH.

6.1.1.2 Printer Driver Setup

Click **Setup** to configure the printer driver for use with the SC7000 then click **Auto Setup** in the next dialog box.

Provided that you do not set up a virtual printer, the printer driver searches for a PPD file (PostScript Printer Description file) suitable for the SC7000. If it finds exactly one PPD file for the SC7000, the driver will use this PPD for self-configuration.

If you followed the instructions of the previous section about software installation, there is more than one PPD file for the SC7000 installed on your computer. The printer driver displays a list of all PPDs for different RISOGRAPH models. In some cases (e.g. if you have copied the SC7000 PPD files to a different directory than normally used for this purpose), the search may fail and you'll have to select the PPD file manually.

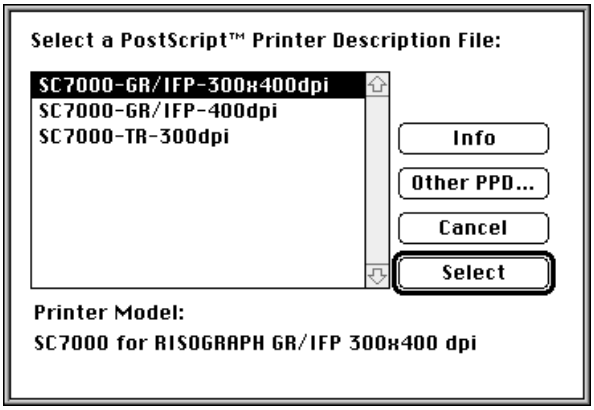

Figure 6.2: PPD File Selection (Macintosh compatible)

In either case, the printer driver displays a dialog box to select a PPD file. For information on a specific PPD file, click the file in the list in this dialog box. When you have found the SC7000 PPD file for your specific RISOGRAPH model, click the PPD file, then click **Select** and click **OK**.

PPD files are usually stored in System Folder\Extensions\Printer Descriptions.

Back to the **Chooser**, select the SC7000 and click **Setup** again.

Click **Configure** to get to the **Installable Options** dialog box.

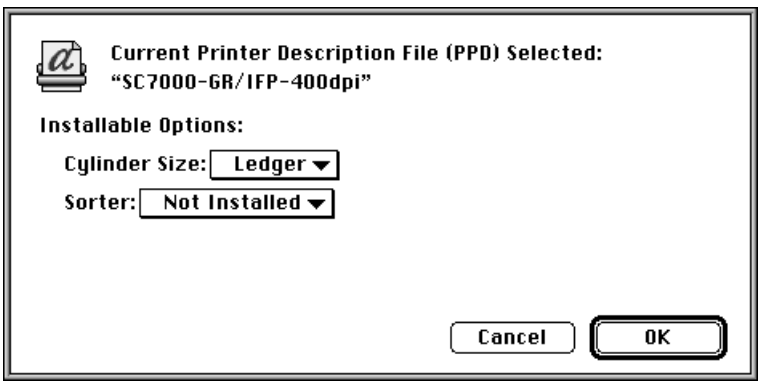

Figure 6.3: Installable Options Dialog Box (Macintosh compatible)

Select a **Cylinder Size** which corresponds to the cylinder installed in your RISOGRAPH. Paper sizes which are displayed in the **Page Setup** dialog box depend on the selected **Cylinder Size**. See the paragraph on print options below for details on how to select a paper size for printing.

Choose **Installed** or **Not Installed** from the **Sorter** options depending on your RISOGRAPH's configuration. Correct these settings whenever the RISOGRAPH's setup has changed.

After changing the **Cylinder Size**, always check the **Paper** option in the **Page Setup** dialog box as described below. If the new cylinder does not support the previously selected paper size, a new item called **Other** is selected. Change this setting and select another paper size.

Click **OK** to complete the printer driver setup.

To change the printer driver setup at any time, click **Setup** from the **Chooser** as described above. Click **Auto Setup** to search automatically for a PPD file or **Select PPD** for manual selection. Click **Printer Info** to display some general printer information. **Auto Setup** and **Printer Info** require communication between your computer and the SC7000 and are therefore not available when setting up a virtual printer.

6.1.1.3 Print Options

Prior to printing from within an application program, select **Page Setup** from the **File** menu. There may be application programs which use a different name, but they will provide a method to set up the page.

The **Page Setup** dialog box which appears on the screen is supplied by the printer driver but may have extra options provided by your application program. To view how the basic **Page Setup** dialog box appears provided by the printer driver, view it from within SimpleText.

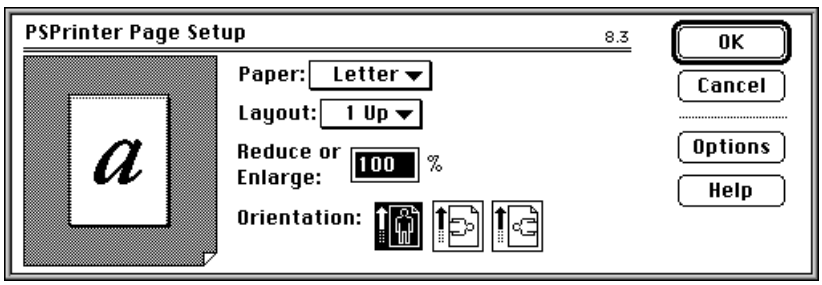

Figure 6.4: Page Setup Dialog Box (Macintosh compatible)

Use the **Paper** option to select the desired paper size. Available paper sizes depend on the cylinder size selected from the **Installable Options** dialog box (see printer driver setup above).

You may click the page image box on the left to alternate between an image of the appearance of the page and a numerical listing of the page dimensions in millimeters or inches. To define a custom paper size, select **Custom** from the **Paper** options, then click the page image box on the left and edit the paper dimensions.

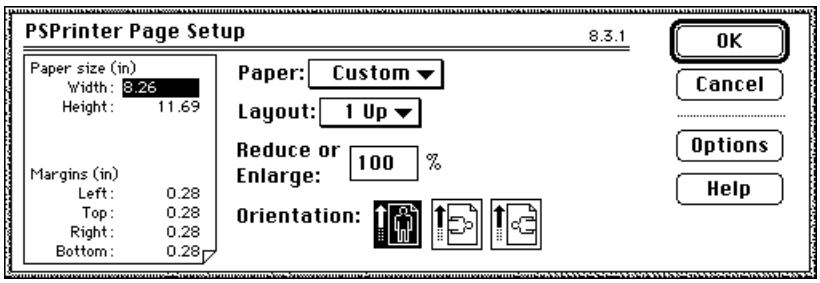

Figure 6.5: Custom Paper Size (Macintosh compatible)

There is no cross-check between a custom paper size and the size of the installed cylinder. Any value will be accepted if it is printable with the largest possible cylinder for the respective series of RISOGRAPH models. Therefore, please check that you enter a valid custom paper size for the cylinder which you are currently using.

The **Layout** option allows several pages of the document to be printed on one sheet of paper. The pages will be automatically adjusted to fit.

Reduce or Enlarge rescales the page according to the scale factor. Scale factors may range from 25% to 400%. The rescaled page will be aligned to the top left corner of the paper.

Orientation distinguishes portrait and landscape pages. Please see the RISOGRAPH setup section of the *SC7000 User Manual* for an explanation of orientation versus feed direction. The **Orientation** option is usually set up correctly by default.

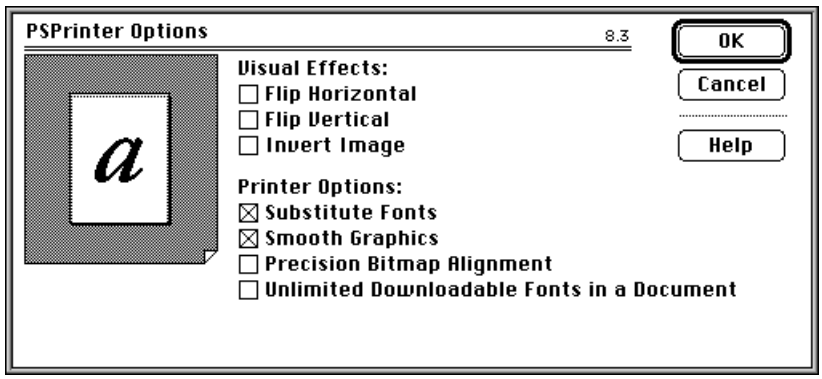

Figure 6.6: Page Setup Options (Macintosh compatible)

Click the **Options** button to access the following layout and formatting options. For normal operation, leave all options as is.

Flip Horizontal or **Flip Vertical** may be used to flip the page in order to print a mirror image.

Invert Image substitutes black for white and vice versa.

Substitute Fonts lets the SC7000 replace the fonts of the document by resident fonts for printing, if available.

Smooth Graphics may be used to smooth the jagged edges of images.

Precision Bitmap Alignment reduces bitmapped images in order to match the best resolution suitable for the printer. This may improve readability of the image.

Unlimited Downloadable Fonts in a Document lets the printer driver download fonts only at the moment when they are needed. If you have documents with a large number of fonts which do not print due to memory limitations, please try this setting.

Click **OK** to exit the **Options** dialog box and save your changes or click **Cancel** to exit and leave all options as is. Click **OK** to exit the **Page Setup** dialog box.

6.1.2 SC7000 Utility

To run the SC7000 utility, double-click the **SC7000 Utility** icon from the SC7000 folder of your Macintosh compatible's hard disk. Make sure to select the SC7000 in the **Chooser** before starting the **SC7000 Utility**.

The SC7000 utility is based on the Apple LaserWriter utility but has additional functions specific to the SC7000.

The LaserWriter utility consists of three menus: **File**, **Edit**, and **Utilities**. The menus are discussed in the following paragraphs.

6.1.2.1 The File Menu

The **File** menu contains file and font-related functions.

Select **Download Fonts** from the **File** menu to download one or more fonts to the SC7000. Select Printer to download fonts to memory or choose **Printer's disk(s)** to permanently install fonts on hard disk. The pre-selected disk **SCSI Drive 0** cannot be changed.

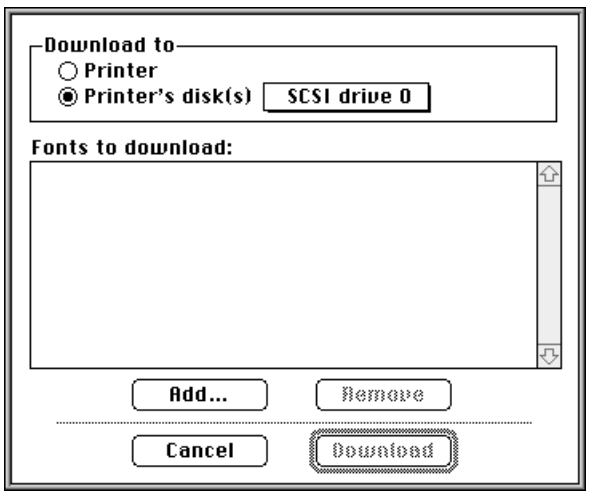

Figure 6.7: Download Fonts (Macintosh compatible)

Click the **Add** button to add a font to the **Fonts to download** list. If you decide not to download a font you added before, select the font from the **Fonts to download** list and click **Remove**. Finally, click **Download** to download the fonts from the **Fonts to download** list.

Select **Display Available Fonts** to display a list of fonts installed on the SC7000. Choose **Printer's Disk(s)** to display resident or permanently downloaded fonts. Choose **Printer** to display fonts downloaded to memory.

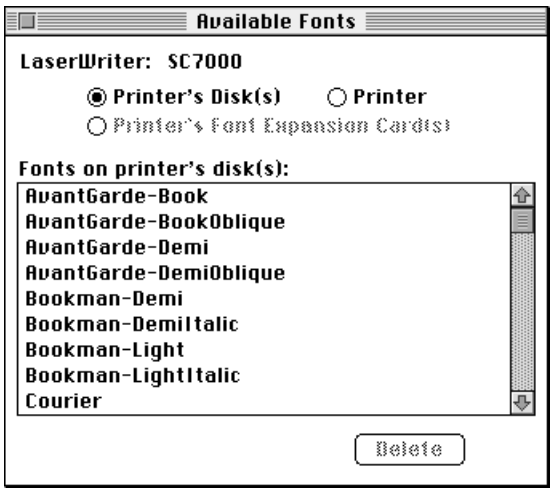

Figure 6.8: Display Available Fonts (Macintosh compatible)

To delete a permanently downloaded font from the hard disk of the SC7000, select the font from the **Fonts on printer's disk(s)** list and click **Delete**. To delete fonts from memory, see **Restart Printer** from the **Utilities** menu.

Initialize Printer's Disk from the **File** menu is not intended for use with the SC7000. If you want to initialize the hard disk of the SC7000, use **SC7000 Initialize Disk** from the **Utilities** menu instead.

Page Setup from the **File** menu displays the printer driver's **Page Setup** dialog box as described in the printer driver section above. Use **Page Setup** to set up the page before printing the font catalogue, font samples or configuration page. Note that the page setup is ignored when using **SC7000 Print Page** from the **Utilities** menu.

Choose **Print Font Catalog** to print a list of installed fonts. Select **Print Font Samples** to print samples of installed fonts.

Select **Quit** from the **File** menu to exit the SC7000 utility.

6.1.2.2 The Edit Menu

The LaserWriter utility offers a standard set of editing functions: **Undo**, **Cut**, **Copy**, **Paste**, and **Clear**.

Please refer to your Macintosh compatible's documentation if you need an explanation of the editing functions.

6.1.2.3 The Utilities Menu

The **Utilities** Menu The Utilities menu contains several basic functions and all additional functions which are specific to the SC7000.

6.1.2.3.1 Basic Functions

Note that some of the items in the **Utilities** menu are disabled because they cannot be used in conjunction with the SC7000: **Imaging Options**, **Calibrate Printer**, **Configure Communication**, **Print Density**, **Paper Handling**, and **Power Saving** are grayed out and therefore cannot be selected.

Select **Name Printer** from the **Utilities** menu to change the printer name which is displayed by the Chooser. Enter a new name and click **Rename** to rename the SC7000. Since your Macintosh compatible computer does not keep track of those changes, use the **Chooser** from the Apple Menu to reselect the SC7000. See the section about network protocols in this manual for additional information on the EtherTalk printer name.

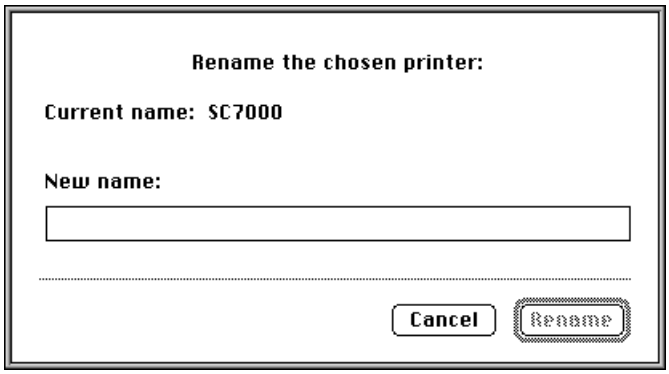

Figure 6.9: Name Printer (Macintosh compatible)

Select **Get Page Count** to display the total number of pages printed on your SC7000. **Initialize Printer's Disk** from the **File** menu resets the page count to zero.

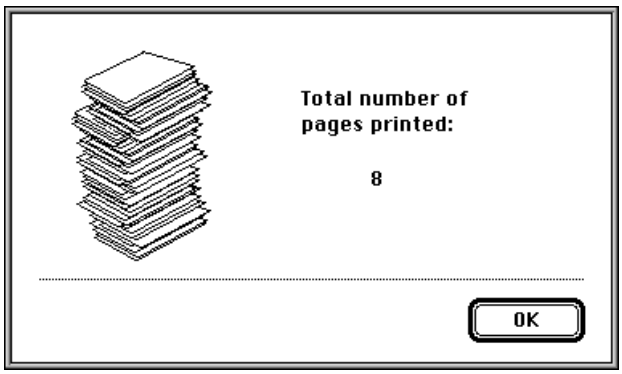

Figure 6.10: Get Page Count (Macintosh compatible)

To download a PostScript file to the SC7000, select **Download PostScript File** from the **Utilities** menu. Select the desired PostScript file. Click **Download** to download the file. Do not use **Download PostScript File** to download fonts. Use **Download Fonts** from the **File** menu instead.

Select **Restart Printer** to restart the SC7000. Click **Restart** to confirm the message which appears on your screen. All fonts downloaded to memory will be deleted, but fonts downloaded to disk will not be affected. Make sure not to disturb other users when restarting the SC7000.

Select **Change Zone** to assign the logical AppleTalk zone where the SC7000 resides. If AppleTalk zone is not set for the network to which the SC7000 is connected, the **Change Zone** option is unavailable.

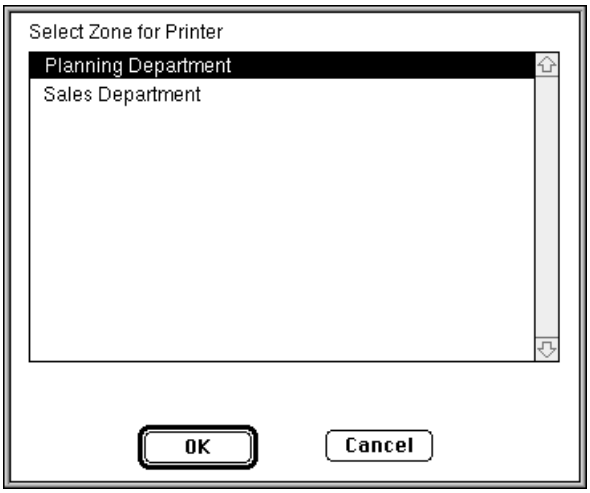

Figure 6.11: Change Zone (Macintosh compatible)

Make sure to read the section on network protocols in this manual for important information about AppleTalk zones.

6.1.2.3.2 Specific Functions

The description above explains basic functions of the LaserWriter Utility. The following functions from the **Utilities** menu are specific to the SC7000.

Select **SC7000 Print Page** to print one of five different test pages. Choose **Self Test Page**, **Settings Page**, **Font List Page**, **Font Sample Page** or **Sample Page** from the **Print** pull-down menu. Click **Print** to print the selected page.

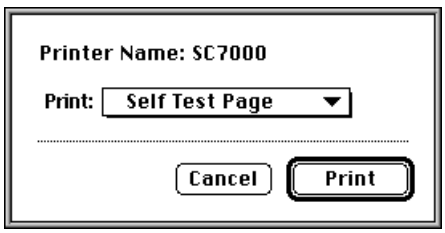

Figure 6.12: SC7000 Print Page (Macintosh compatible)

See the appendix for a description of the individual test pages. Note that the page size is independent of settings made in **Page Setup** from the **File** menu.

Click **SC7000 Setup General** to display general configuration information for SC7000 and RISOGRAPH.

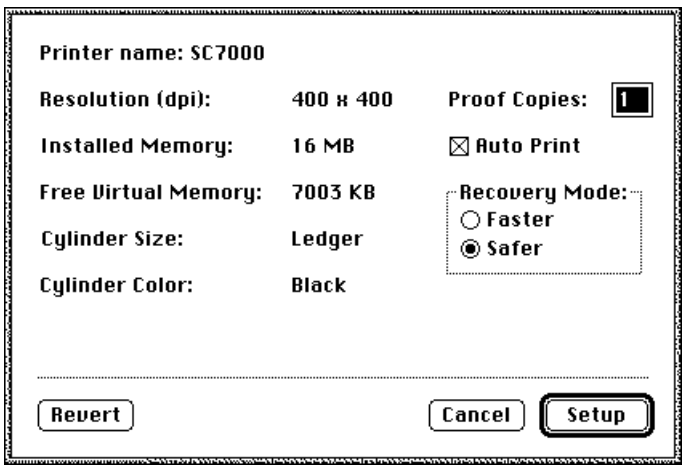

Figure 6.13: SC7000 Setup General (Macintosh compatible)

Configuration information includes **Resolution**, **Cylinder Size**, and **Cylinder Color** of the connected RISOGRAPH and **Installed Memory**, and **Free Virtual Memory** of the SC7000.

The SC7000 detects the RISOGRAPH's **Cylinder Size** at startup, therefore this information may be out-of-date if somebody has changed the cylinder in the meantime. Installed memory refers to the installed hardware. Total and used virtual memory denote resources of the PostScript interpreter.

Furthermore, **SC7000 Setup General** allows to set the number of **Proof Copies** to be set, **Auto Print** mode to be disabled or enabled and the **Recovery Mode** to be set. Click **Revert** to restore the initial settings.

When **Auto Print** is checked, the RISOGRAPH generates a master and prints the specified number of copies. If not checked, the RISOGRAPH generates a master, prints one proof copy and stops until the interface mode is enabled again.

The **Recovery Mode** determines the moment when the frame buffer of the SC7000 is cleared to compute the next page.

Faster causes the SC7000 to discard the contents of the frame buffer immediately after data transmission to the RISOGRAPH. The SC7000 begins to compute the next page while the RISOGRAPH is making the master. If the master jams, the error cannot be recovered and the page of the document must be printed later again.

If the **Recovery Mode** is **Safer**, the SC7000 stores the frame buffer until the master is completed and the RISOGRAPH starts printing. It will take some more time until the following page can be printed. If a jam occurs while making the master, the error can be recovered and a new master can be made immediately.

SC7000 Setup Printing from the **Utilities** menu allows to set the following parameters for printing. Click **Revert** to get back to the initial values.

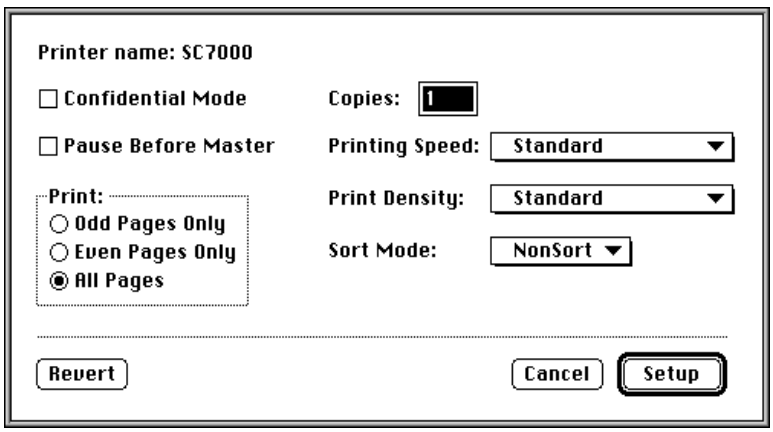

Figure 6.14: SC7000 Setup Printing (Macintosh compatible)

The number of **Copies** overrides settings included in a PostScript document provided that **Copies** differs from 1. Changing the number of **Copies** may be useful if a document is only available as a PostScript file for download and if the PostScript file does not specify the desired number of copies.

Usually, you will print from within an application program and select the number of copies in the **Print** dialog box of your application. In this case, it is important to leave the **Copies** setting as 1.

Confidential Mode is disabled by default. To enable **Confidential Mode**, check **Confidential Mode** in the **Printing** dialog box. The last master of your document will be immediately removed from the cylinder after printing if **Confidential Mode** is enabled.

Setting the **Printing Speed** or **Print Density** from the respective pull-down menu has the same effects as setting **print speed** or **print density** from the RISOGRAPH's control panel. Choose between **Slowest**, **Slow**, **Standard**, **Fast**, and **Fastest** for the **Print Speed** and between **Lightest**, **Light**, **Standard**, **Dark**, and **Darkest** for the **Print Density**.

The **Sort Mode** selected from the **Sort Mode** pull-down menu overrides settings included in a PostScript document provided that it differs from **NonSort**. Available Sort Modes are **NonSort**, **Sort**, **Group**, and **Stack**. See your sorter's user manual for information about the Sort Modes.

It may be useful to set a **Sort Mode** if a document is only available as a PostScript file for download and if the PostScript file does not specify the Sort Mode. It may also be useful when printing from systems which do not use PPD (PostScript Printer Description) files for the SC7000, e.g. MS-DOS.

Make sure to reset the **Sort Mode** to **NonSort** for normal operation.

Both the **Pause Before Next Master** and the **Print Pages** are important when printing multi-page documents.

The **Pause Before Next Master** is disabled by default. Enabling **Pause Before Next Master** generates all first page copies until the interface mode is reenabled. Choose from **Odd Pages Only**, **Even Pages Only** and **All pages** in the **Print Pages** field.

Check that the **Pause Before Next Master** and **Print Pages** are reset to default values for normal printing.

SC7000 Setup PostScript from the **Utilities** menu may be used to display and change PostScript-related settings. Click **Revert** to restore the initial values.

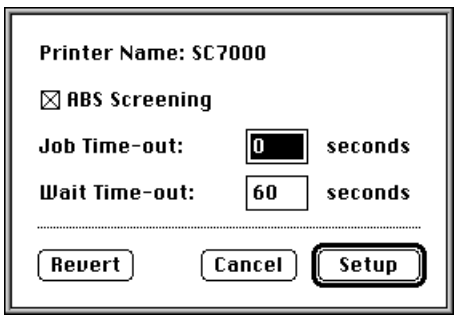

Figure 6.15: SC7000 Setup PostScript (Macintosh compatible)

To print ABS (Adobe Brilliant Screens) frequency-modulated screens, **ABS Screening** must be enabled. If **ABS Screening** is checked, ABS is the PostScript default screen. If **ABS Screening** is unchecked, the SC7000 prints conventional screens only. Please refer to the section about screens of the *SC7000 User Manual* for a comparison between conventional and ABS screens.

The value of **Job Time-out** specifies (in seconds) the maximum execution time of a print job until the job is automatically aborted. 0, the default, means that the job is never aborted.

Wait Time-out specifies (in seconds) the maximum time while the SC7000 waits for additional data of a print job. 0 means unlimited waiting, 60 is the default. In rare cases, a higher value than 60 may be required.

Click **SC7000 Setup Communication** from the **Utilities** menu to display and change settings for **TCP/IP**, the **Serial Port** and the **SCSI Port**. Clicking **Revert** restores the initial settings.

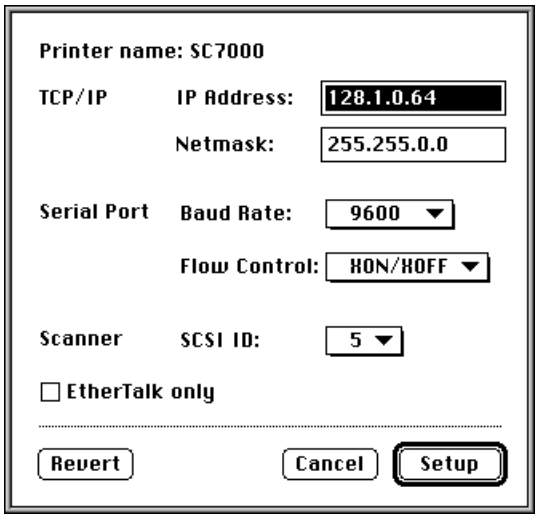

Figure 6.16: SC7000 Setup Communication (Macintosh compatible)

When using the **TCP/IP** network protocol, the **IP Address** and the **Netmask** can be set.

Make sure to read the section on network protocols in this manual for information about how to set the parameters for **TCP/IP**.

Serial Port parameters of the SC7000 may be selected from two pull-down menus:

Baud Rate values between 600 and 38400 can be set.

Flow Control may be chosen from **DTR/DSR** (hardware handshake), **Xon/Xoff** (software handshake) and **None**.

SCSI ID is the ID number of the SC7000 SCSI port which is used for scanning. Each device at the SCSI bus must have a unique **SCSI ID**. ID 7 is usually reserved for the host computer's SCSI port, ID 0 for the host computer's hard disk. The default **SCSI ID** of the SC7000 is 5. Setting another SCSI ID requires a restart of the SC7000 to take effect.

The hardware installation section in this manual contains additional information about the serial port of the SC7000. Note that changing the **Serial Port** parameters will immediately take effect, but changing parameters for **TCP/IP** requires the SC7000 to be restarted..

If **EtherTalk Only** is checked, the SC7000 is connected by EtherTalk only.

SC7000 Initialize Disk should be used with extreme care. It resets the SC7000 to the condition at the time of shipment from the factory. **SC7000 Initialize Disk** initializes the hard disk during the next restart of the SC7000 and restores all data on the hard disk to the initial state when shipped from the factory. All changes made by users including downloaded fonts will be permanently lost.

SC7000 Restore Factory Defaults from the **Utilities** menu resets all settings of the SC7000 to their factory defaults. This includes all parameters which may be changed by means of the SC7000 utility. The SC7000 automatically restarts when restoring the factory defaults.

6.2 Microsoft Windows

6.2.1 PostScript Printer Driver for Windows 3.1x

To set up the SC7000 PostScript printer driver, you need to access the **Printer Driver Setup** dialog box. There are two ways to get to the **Printer Driver Setup** dialog box:

1. From the **Program Manager**, double-click **Control Panel** which is located in **Main**. Double-click **Printers**. In the **Printers** dialog box, select the SC7000 from the list of **Installed Printers** and click **Setup**.
2. Alternatively, double-click **Print Manager** which is located in **Main**. Choose **Printer Setup** from the **Options** Menu. In the **Printers** dialog box, select the SC7000 from the list of **Installed Printers** and click **Setup**.

A variety of tabs is visible on top of the **Printer Driver Setup** dialog box. The tabs are denoted **Paper**, **Features**, **Fonts**, **PostScript**, **Job Control** and **Watermark**. Clicking one of the tabs makes the respective file card the uppermost on the stack. All configuration options of each of the tabs will be discussed in the following paragraphs:

6.2.1.1 The Paper Tab

Click the **Paper** tab to display the **Paper** tab dialog box.

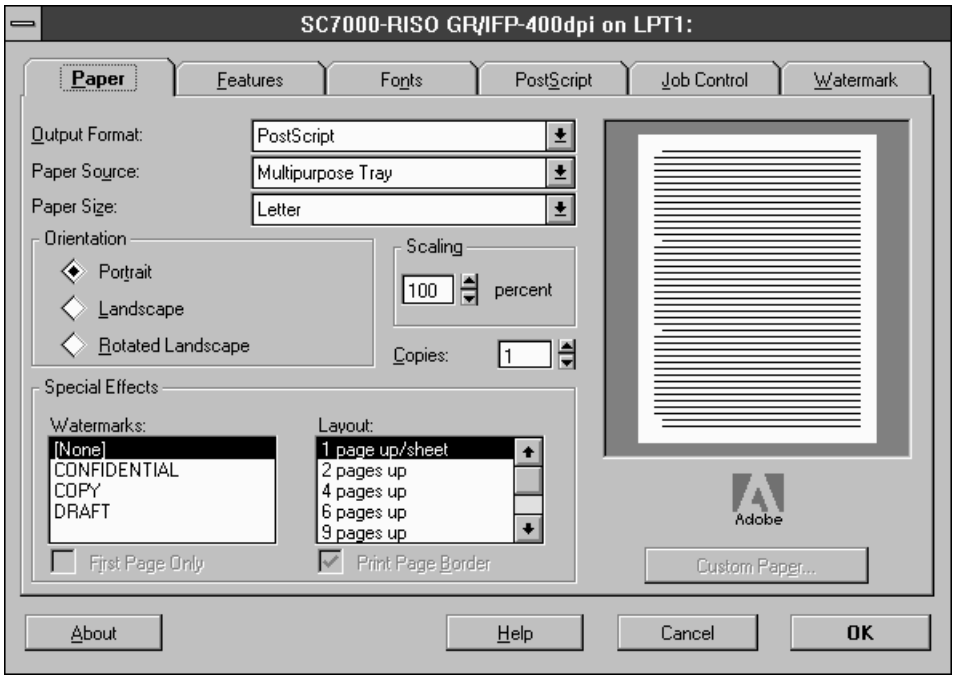

Figure 6.17: PostScript Printer Driver Setup / Paper Tab (Windows 3.1x)

Paper Size options depend on the **Cylinder Size** setting made from the **Features** tab. For this reason, you may want to set the **Cylinder Size** first using the **Features** tab dialog box described below.

Select a **Paper Size** according to your document setup. You may select **Custom Paper** if you want to enter the dimensions of a non-standard **Paper Size** manually. After choosing **Custom Paper**, click the **Custom Paper** button to enter the paper size.

Figure 6.18: Custom Paper Dialog Box (Windows 3.1x)

Note that you are responsible for entering a printable custom paper size. There is no cross-check between a custom paper size and the size of the installed cylinder. Any value will be accepted if it is printable with the largest possible cylinder for the respective series of RISOGRAPH models.

Use the **Output Format** option to select either **PostScript** for normal printing or **Encapsulated PostScript**. **Encapsulated PostScript** (EPS) is only useful for printing to a file and is restricted to one-page documents.

Paper Source cannot be changed because the RISOGRAPH offers only one paper feed tray.

Orientation distinguishes **Portrait** and **Landscape** pages. Orientation versus feed direction is described in the RISOGRAPH setup section of the *SC7000 User Manual*. **Rotated Landscape** is similar to **Landscape** but reverses top and bottom of the page.

The **Scaling** option enables you to rescale the page in the range from 10% to 400%.

Do not change the number of **Copies** on the **Paper** file card. The value of **Copies** should always remain 1. Instead, choose the number of copies directly from within your application program.

Watermarks which are defined by means of the **Watermark** tab may be selected for printing from the **Watermarks** list. Select **First Page Only** after selecting the watermark if you want to print it only on the first page of your document.

Select **None** from the **Watermarks** list for normal printing.

The **Layout** option allows to place several pages of a document on one sheet of paper. The document's pages are automatically adjusted to fit. Select **Print Page Border** to print a frame around each page if you print more than one document page per sheet.

Select **1 page up/sheet** for normal printing.

6.2.1.2 The Features Tab

To configure the printer driver for your RISOGRAPH, click the **Features** tab.

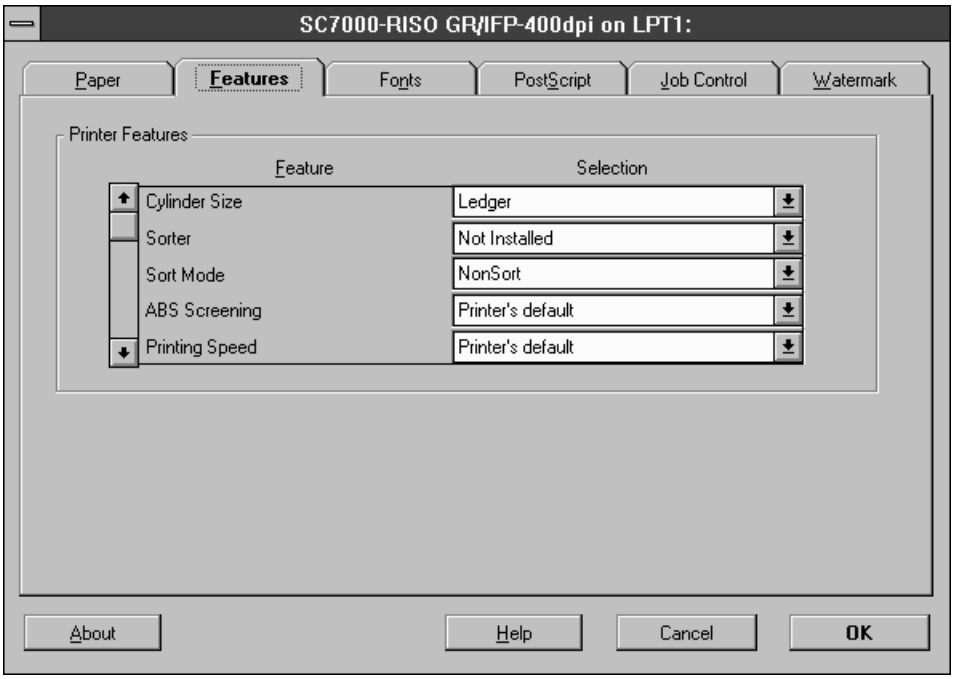

Figure 6.19: PostScript Printer Driver Setup / Features Tab (Windows 3.1x)

Select the **Cylinder Size** according to the cylinder which is installed in your RISOGRAPH.

Select **Installed** or **Not Installed** from the **Sorter** options, depending on the configuration of your RISOGRAPH.

If there is a sorter installed, select the **Sort Mode**. Choose between **Sort**, **Group**, **Stack** or **NonSort**. **NonSort** causes the sorter to use its output tray. See the sorter's user manual for more information about Sort Modes.

After changing the **Cylinder Size**, always check the **Paper Size** option on the **Paper** file card. If the new cylinder does not support the previously selected **Paper Size**, select a new **Paper Size** which is supported by the cylinder.

For descriptions of other options, please refer to the *SC7000 User Manual*.

6.2.1.3 The Fonts Tab

To set up font handling, click the **Fonts** tab.

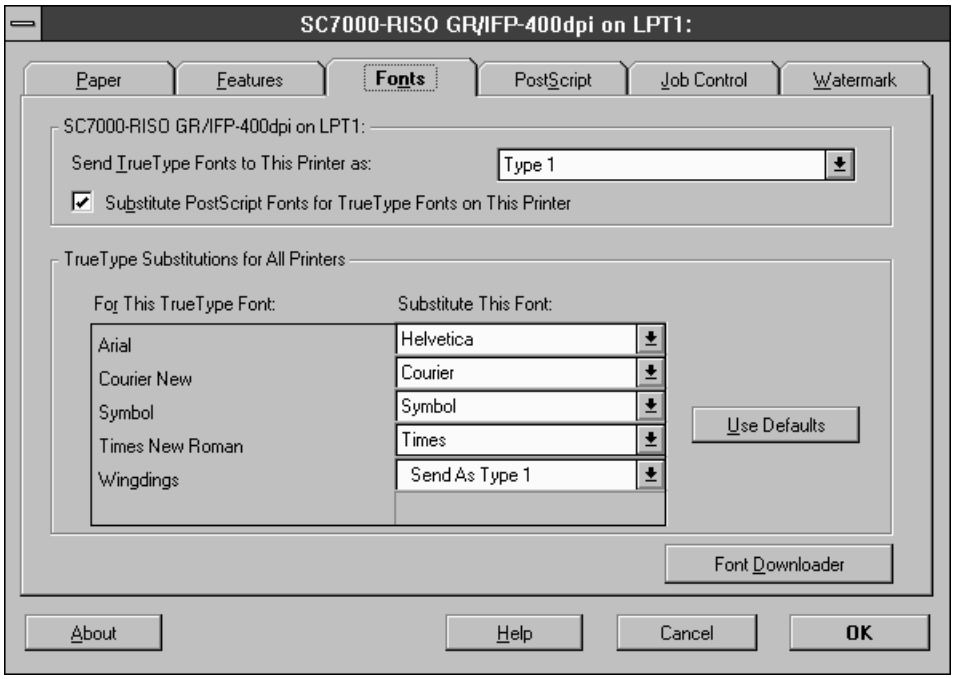

Figure 6.20: PostScript Printer Driver Setup / Fonts Tab (Windows 3.1x)

The **Send TrueType Fonts to This Printer as** option determines the behavior of the printer driver if a document uses TrueType fonts.

Type 1 converts the TrueType font to the Type 1 PostScript outline font format.

Type 3 converts the TrueType font to the Type 3 PostScript bitmap font format.

Both conversions result in a loss of quality, therefore it is possible but not recommended to use the **Type 1** or **Type 3** settings.

Type 42 makes the TrueType font a Type 42 PostScript font. The Type 42 setting does not require a font format conversion. Instead, a Type 42 font is a TrueType font which is wrapped into some PostScript code suitable for the SC7000. This improves quality when printing a TrueType font and is therefore the recommended setting.

The **Don't Send** option requires the TrueType font to be built into the printer. It cannot be used when printing to the SC7000.

The checkbox **Substitute PostScript Fonts for TrueType Fonts on This Printer** tells the printer driver whether to substitute TrueType fonts according to the substitution table. If a TrueType font is substituted by its PostScript equivalent, it prints faster, especially if the PostScript font is printer-resident. On the other hand, TrueType and PostScript fonts are not guaranteed to look exactly the same.

The table **TrueType Substitutions for All Printers** defines all font substitutions. It is only used if the **Substitute PostScript Fonts for TrueType Fonts on This Printer** option is checked. Click the **Use Defaults** button to restore the recommended PostScript font substitutions in the table.

See the description of the **Job Control** tab below on how to completely disable the download of fonts.

6.2.1.4 Font Downloader

The **Font Downloader** button from the **Fonts** tab dialog box starts the **Adobe PostScript Font Downloader** which is part of the printer driver. This is an alternative to the font downloader of the SC7000 utility, but we recommend to use the SC7000 utility for managing and downloading PostScript fonts of the SC7000.

If you prefer to use the **Adobe PostScript Font Downloader**, make sure that the SC7000 is selected as your current printer before you continue.

Note that the fonts you want to download must be installed on your computer by means of Adobe Type Manager software. Otherwise, the **Adobe PostScript Font Downloader** cannot access the fonts.

6.2.1.4.1 General Options

Select the destination of your download from the **Destination device** list. See the typefaces section of the *SC7000 User Manual* if you are not sure whether to select **memory** or **disk**.

Select one or more fonts from the **Fonts available** list. Click **Download** to start downloading the selected fonts.

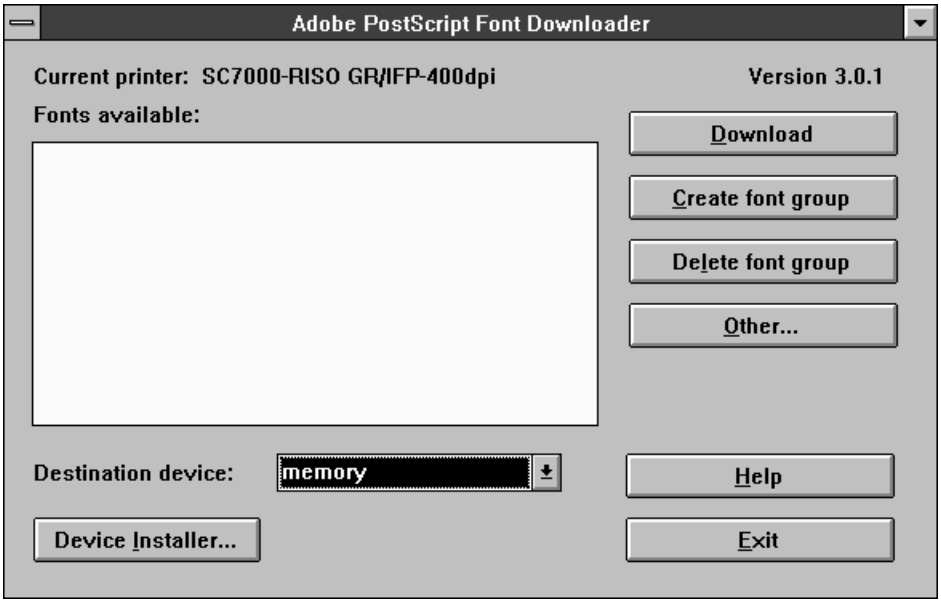

Figure 6.21: Adobe PostScript Font Downloader Dialog Box (Windows 3.1x)

If you often download the same set of fonts, you may want to create a group of fonts. Once created, the font group appears in the **Fonts available** list and can be selected for downloading like any individual font.

To create a group, select the desired fonts from the **Fonts available** list. Click **Create font group**. After entering a name, the font group appears at the top of the **Fonts available** list.

To delete a font group, select it from the **Fonts available** list and click **Delete font group**.

The SC7000 does not provide any installable devices. Therefore, the **Device Installer** is not of use with the SC7000.

6.2.1.4.2 Other Options

Several useful options are accessible by clicking the **Other** button. A dialog box will appear on screen. Choose one of the options from the dialog box and click **OK** to execute the selected action.

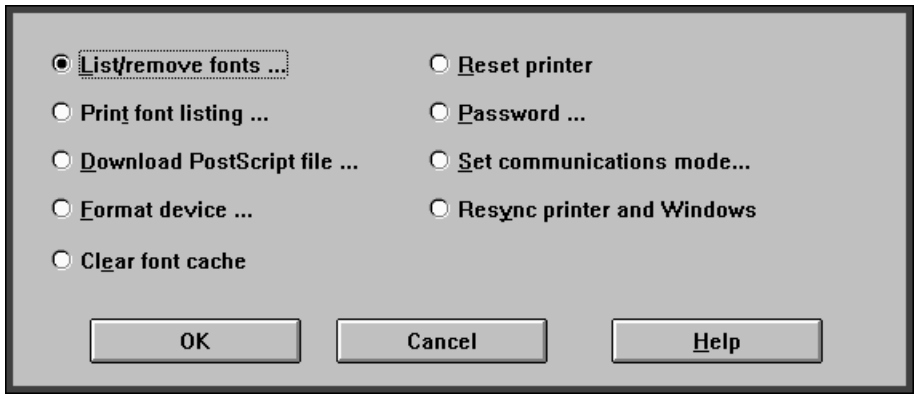

Figure 6.22: PostScript Font Downloader / Other Options (Windows 3.1x)

List/remove fonts displays a list of **Available fonts** on-screen. If **disk** is selected from the **Target device** list, you may choose fonts from the **Available fonts** list and click **Delete** to remove them.

Fonts which are stored in memory must be removed by means of the **Reset printer** option. Alternatively, use the key on the SC7000 operator panel to reset the SC7000 or switch the SC7000 off and on again. Usage of the key is explained in the SC7000 operator panel section of the *SC7000 User Manual*. Make sure you do not interrupt other users when restarting the SC7000.

Choose **Print font listing** to print a list of font names on your RISOGRAPH. Select **Print font list** to print font names only or select **Print font samples** to print each font name in its actual typeface. Note that similar font pages can be printed by means of the SC7000 utility described below.

The **Download PostScript file** option enables you to download a PostScript file to the SC7000.

Format device is only useful for installed devices and therefore not of use for the SC7000.

Clear font cache is also not intended for use with the SC7000.

Reset Printer performs a restart of the SC7000. Make sure not to interrupt other users when resetting the SC7000.

The **Password** option allows verification or entry of the PostScript password which is used by the font downloader to access the SC7000. The **Password** option does not change the password of the SC7000. The PostScript password is necessary to permanently change the configuration of a PostScript interpreter, including font download.

Select **Check password** to compare the actual password with the one entered for use by the downloader. Select **Enter password** to enter a new password for use by the downloader.

The **Set communications mode** option sets up the font downloader for operation in a specific environment. Select **DOS network** or **AppleTalk network** depending on the type of network you are using, or select **No network** if your SC7000 connects to your computer via the parallel or the serial port.

Finally, **Resync printer and Windows** updates font information if your SC7000 is connected via the serial port. This information is needed by Windows to be aware of the installed fonts.

6.2.1.5 The PostScript Tab

The **PostScript** tab allows the setting of several PostScript options. In most cases, you will not need to change these settings.

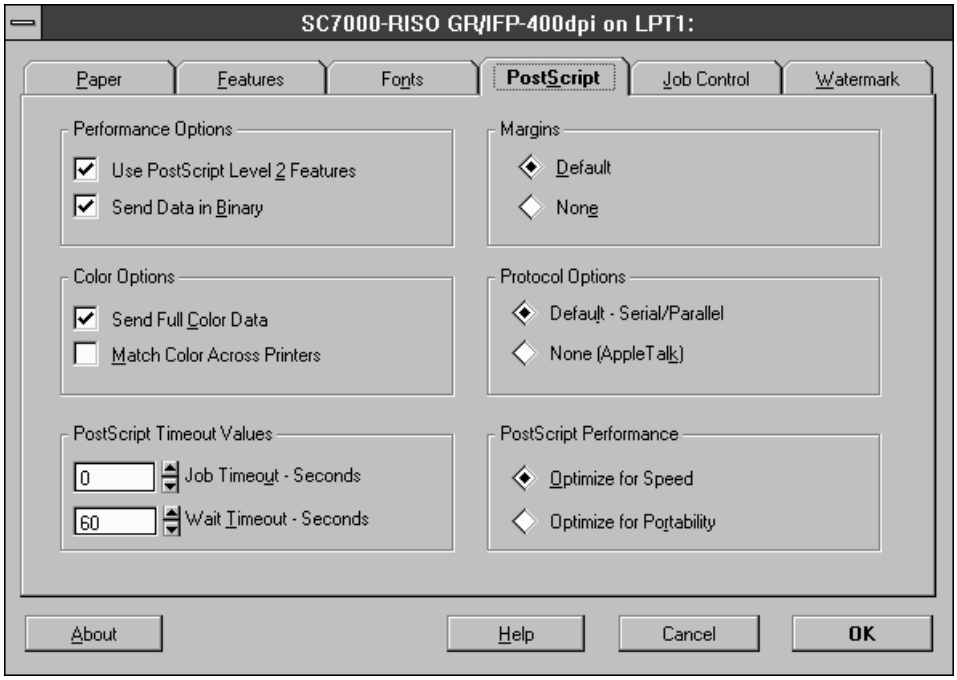

Figure 6.23: PostScript Printer Driver Setup / PostScript Tab (Windows 3.1x)

Use PostScript Level 2 Features tells the driver to generate PostScript Level 2 data. It is recommended to use this setting because PostScript Level 2 code often prints faster than PostScript Level 1 data.

The **Send Data in Binary** checkbox determines if the printer driver sends binary or ASCII data to the SC7000. Sending binary data reduces the amount of data and therefore speeds up printing, but binary data must be supported by the communication channel.

Send Full Color Data specifies if color information will be included in image data.

Match Colors Across Printers specifies usage of PostScript Level 2 color matching features. Leave the settings for **Color Options** as is, i.e. leave **Send Full Color Data** checked and leave **Match Colors Across Printers** unchecked.

Job Timeout is the maximum execution time of a print job until the job is automatically aborted. A value of 0 means that the job is never aborted.

Wait Timeout specifies the maximum time while the SC7000 waits for additional data of a print job. 0 means unlimited waiting. In rare cases, some Windows application programs may require **Wait Timeout** values of several minutes when they interrupt data transmission due to extended internal computations.

Margins determines the printable area of the page which is reported to the application program by the printer driver.

Default, the recommended setting, causes the driver to report the true value of the printable area. If **None** is selected, the printer driver will report the paper size. Do not use **None** except when your application program prints pages with the edges clipped.

The value of **Protocol Options** tells the printer driver whether to send the CTRL-D character at the beginning and end of each job. The **Default - Serial/Parallel** setting forces the printer driver to send a CTRL-D at the beginning and end of each PostScript job. It is suitable for serial and parallel ports as well as for most network types.

If **None (AppleTalk)** is selected, the driver does not send the CTRL-D at the end of a job. It is important to set **None (AppleTalk)** if your SC7000 is connected via EtherTalk.

Optimize for Speed causes the printer driver to produce PostScript data which prints fast but may require more memory. **Optimize for Speed** is the recommended setting. Select **Optimize for Portability** only if you encounter printing problems which may be caused by memory limitations.

6.2.1.6 The Job Control Tab

Click the **Job Control** tab to set up general job control features.

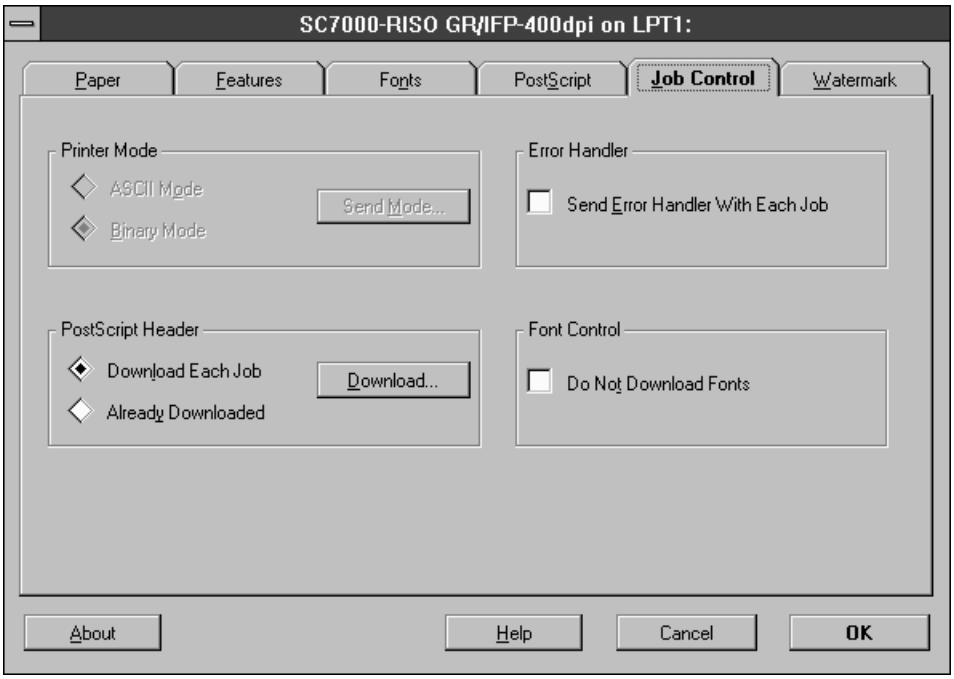

Figure 6.24: PostScript Printer Driver Setup / Job Control Tab (Windows 3.1x)

Note that the **Printer Mode** settings are greyed out. Setting **ASCII Mode** or **Binary Mode** by means of the **Send Mode** button is not necessary because the SC7000 automatically accepts either ASCII or binary data.

The **PostScript Header** is a piece of PostScript data which is needed to print PostScript documents created by the printer driver.

Select **Download Each Job** to send the PostScript header automatically prior to each document. Alternatively, click the **Download** button to download the PostScript header to the SC7000. Then, select **Already Downloaded** to tell the driver not to send a PostScript header with each document.

Downloading the PostScript header once saves some time, but note that the header must be downloaded again after restarting the SC7000. Therefore, it is safer for reliable operation to choose the **Download Each Job** setting.

The **Send Error Handler With Each Job** option may be helpful if a PostScript document fails to print. The error handler is a PostScript program which prints some error information in case of a PostScript error.

Do Not Download Fonts is a feature which causes the printer driver not to download any fonts, even if these fonts are not built into the SC7000. Enable this option only if you know that all necessary fonts are already downloaded to the printer. In this case, checking the **Do Not Download Fonts** checkbox may save significant time during the printing process.

6.2.1.7 The Watermark Tab

The **Watermark** tab dialog box enables you to edit watermarks for your documents. A watermark will print at a certain place of each page of a document if it is selected from the **Paper** tab dialog box.

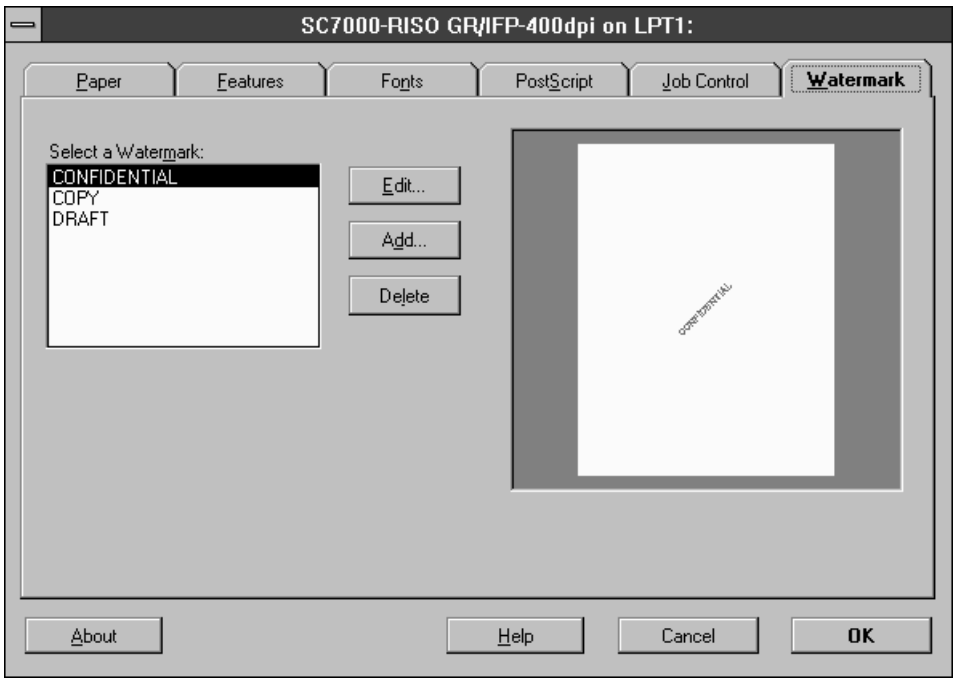

Figure 6.25: PostScript Printer Driver Setup / Watermark Tab (Windows 3.1x)

Choose a watermark for editing from the **Select a Watermark** list.

Click **Edit** to get to the **Edit Watermark** dialog box. The **Edit Watermark** dialog box offers several features to edit the **Text** of the watermark and to select **Font**, font **Size**, font **Style**, **Angle**, **Color** and **Position** of the text. You may also specify whether to print the watermark in the foreground or background and whether to fill the text or to print outlines only.

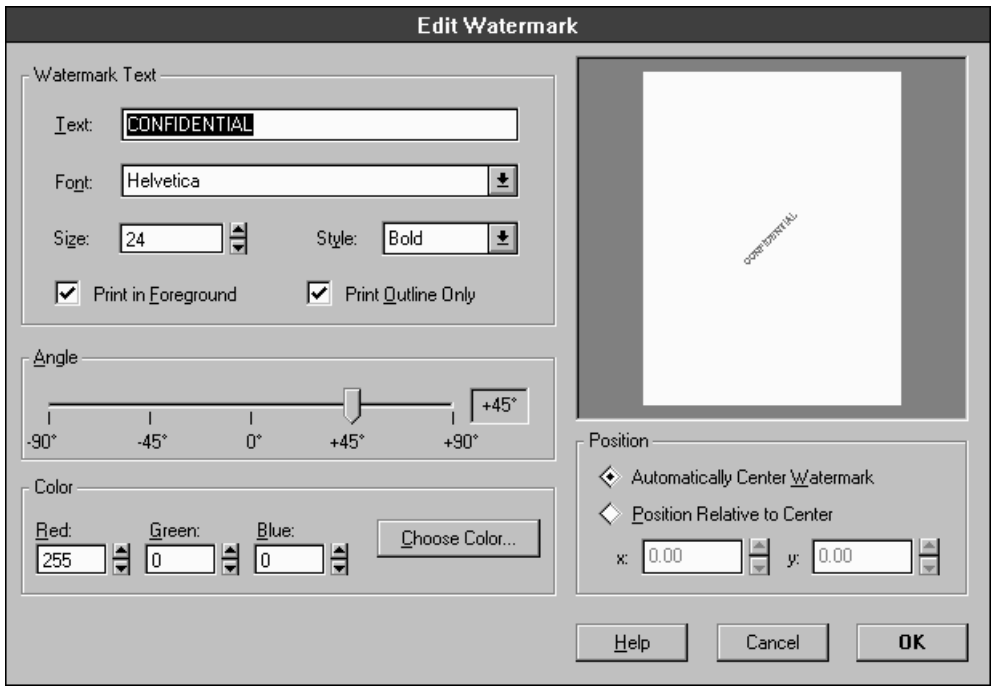

Figure 6.26: Edit Watermark Dialog Box (Windows 3.1x)

Click **OK** to return to the **Watermark** tab dialog box.

The **Add** button allows to add a new watermark to the list. Clicking the **Add** button opens the **Edit Watermark** dialog box described above.

Click **Delete** to remove the selected watermark from the **Select a Watermark** list.

Once you have finished the setup of the SC7000 printer driver, click **OK** to exit the **Printer Driver Setup** dialog box.

6.2.2 PostScript Printer Driver for Windows 95

The **Printer Driver Properties** dialog box needs to be accessed to set up the SC7000 PostScript printer driver. To access the **Printer Driver Properties** dialog box, click the **Start** button in the lower left corner of the screen. Select **Settings**, then select **Printers**. In **Printers**, select the SC7000 printer icon. Click **Properties** from the **File** menu. The **Properties** dialog box appears.

A variety of tabs is visible on top of the **Printer Driver Setup** dialog box. The tabs are denoted **General**, **Details**, **Paper**, **Graphics**, **Fonts**, **Device Options**, **PostScript**, and **Watermarks**.

Click one of the tabs to bring the respective file card to the top of the stack.

Most tabs provide a **Restore Defaults** button which may be used to revert all settings to the original values. From any one of the tabs, clicking **OK** saves changes and leaves the driver, clicking **Cancel** leaves without saving, clicking **Apply** saves all changes without leaving the printer driver.

All configuration options available on each tab are described below.

6.2.2.1 The General Tab

The **General** tab offers the following options:

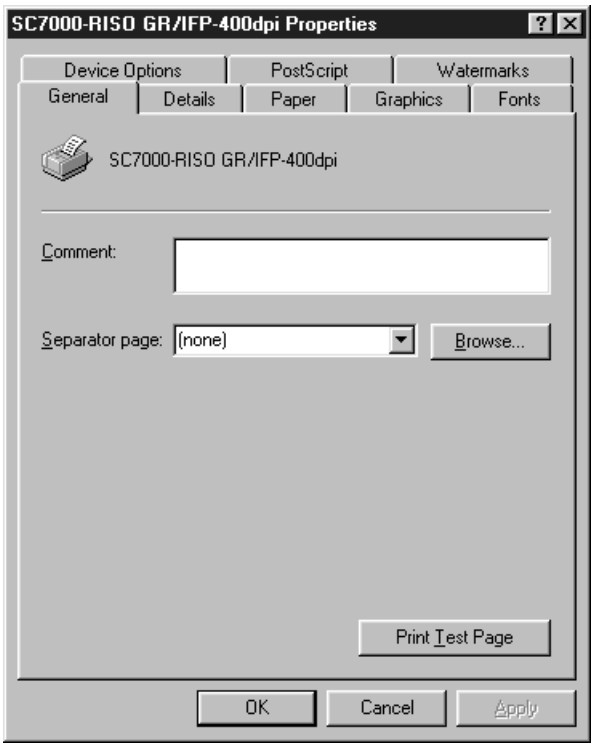

Figure 6.27: PostScript Printer Driver Setup / General Tab (Windows 95)

Enter a **Comment** in the respective box to describe the specific printer configuration in this tab.

You may want to select a **Separator page** to be inserted between each printed document may be selected. Choose between a **Full** page containing graphics, a **Simple** text-only page or **Browse** to select any other page in Windows metafile format. As each separator page requires additional master material, it is recommended to select **none**.

Click **Print Test Page** to print a test page. This is useful in verifying the printer driver setup. Note that other SC7000 test pages may be printed using SC7000 utility software.

6.2.2.2 The Details Tab

Select the **Details** tab to configure the port used by your computer to print from the SC7000.

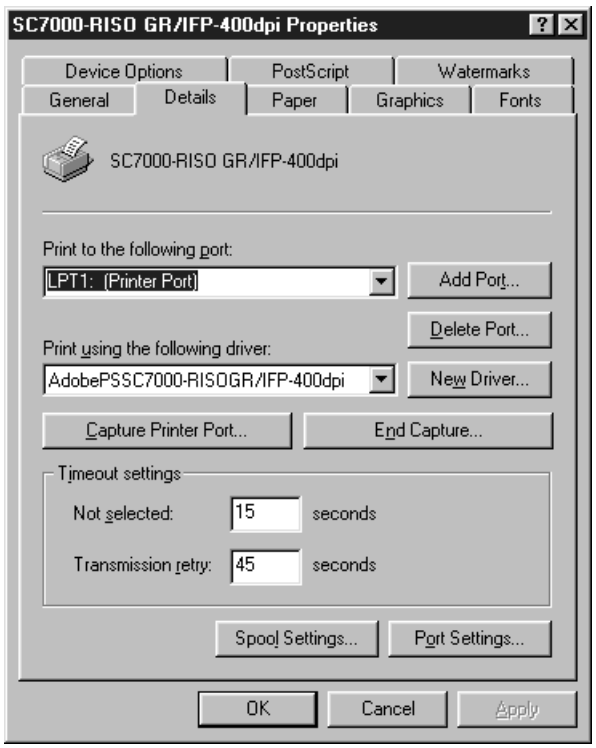

Figure 6.28: PostScript Printer Driver Setup / Details Tab (Windows 95)

Select the port used to connect the SC7000 to your computer from **the Print to the following port** pull-down menu. Alternatively, click **Add Port** to specify a different port or network path. Click **Delete Port** to delete a port from the **Print to the following port list**.

If you want to select a different printer driver, either choose the driver from the **Print using the following driver** pull-down menu or click **New Driver** to select an unlisted driver.

Capture Printer Port may be used to map a port to a network path. **End Capture** removes the mapping of a port to a network path. These options are not necessary if the SC7000 is directly connected to your computer.

Timeout settings specify the length Windows waits for the SC7000 in certain situations. **Not selected** specifies the length Windows waits for the SC7000 to be online. **Transmission retry** specifies the length Windows waits for the SC7000 to be ready to print. Note that these **Timeout settings** differ from the timeouts configured using the SC7000 utility, because these specify the length Windows waits for the SC7000, rather than the reverse.

Click **Spool Settings** to configure your computer to spool print data on the hard disk for background printing. Furthermore, it is also extremely important to enable bi-directional communication using the **Spool Settings** dialog box. Always select **Enable bi-directional support for this printer** from the **Spool Settings** dialog box. **Port Settings** allow the user to enable print spooling for MS-DOS-based application programs and to enable the port state to be checked prior to printing.

To use bi-directional communication with the application program, select the **Print directory to the printer**.

6.2.2.3 The Paper Tab

Click the **Paper** tab to display the Paper tab dialog box.

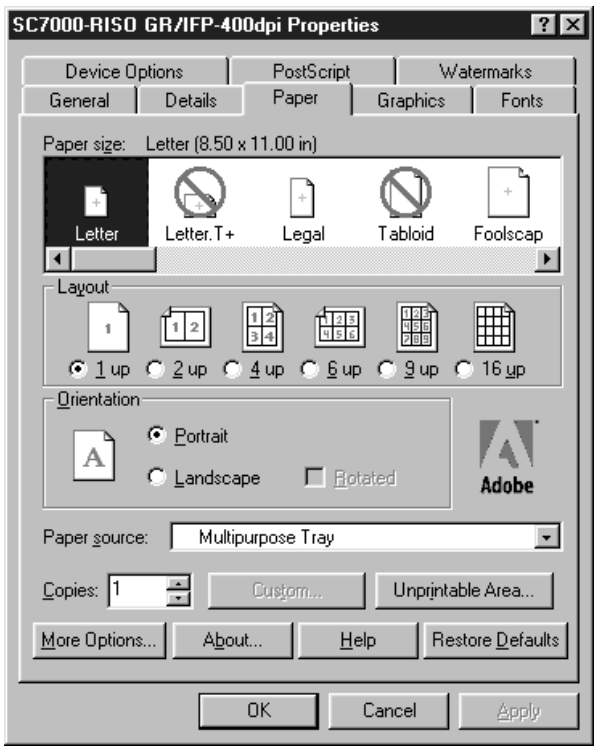

Figure 6.29: PostScript Printer Driver Setup / Paper Tab (Windows 95)

Paper Size options depend on the **Cylinder Size** setting made from the **Device Options** tab. For this reason, the **Cylinder Size** should be set first using the **Device Options** tab dialog box described below. Select a **Paper Size** corresponding to your document setup. You may select **Custom Paper** if you want to enter the dimensions of a non-standard Paper Size manually. Up to three custom sizes may be defined. After choosing one of the **Custom Papers**, click the **Custom** button to enter the paper size.

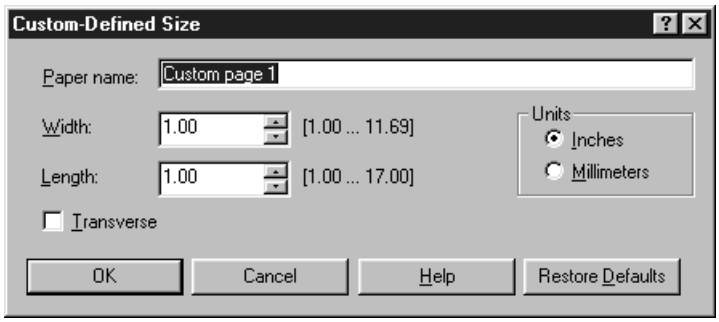

Figure 6.30: PostScript Printer Driver Setup / Custom Paper Dialog Box (Windows 95)

Note that you are responsible for entering a printable custom paper size. There is no cross-check between custom paper size and the installed cylinder size. Any value will be accepted if it is printable with the largest possible cylinder for the respective series of RISOGRAPH models.

The **Layout** option allows to place several pages of a document on one sheet of paper. The document's pages are automatically adjusted to fit. Click **More Paper Options** and check **Print page border** to print a frame around each page if you print more than one document page per sheet.

Orientation distinguishes **Portrait** and **Landscape** pages. **Orientation** versus feed direction is described in the RISOGRAPH setup section of the *SC7000 User Manual*. The **Rotated** check box enables you to reverse the top and bottom of the page with **Landscape**.

Paper Source cannot be changed because the RISOGRAPH offers only one paper feed tray.

Do not change the number of **Copies** on the Paper file card. The value of **Copies** should always remain 1. Instead, choose the number of copies directly from within your application program.

Click **Unprintable Area** to create the non-printable margins at the edges of the selected paper.

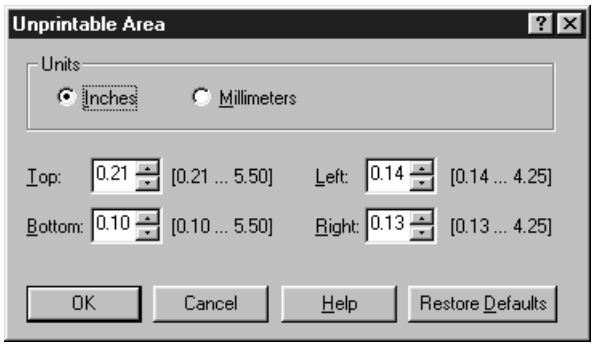

Figure 6.31: PostScript Printer Driver Setup / Unprintable Area Dialog Box (Windows 95)

It is recommended not to change the default values, as these values are optimized for the best results with RISOGRAPH.

6.2.2.4 The Graphics Tab

To set up graphic handling, click the **Graphics** tab.

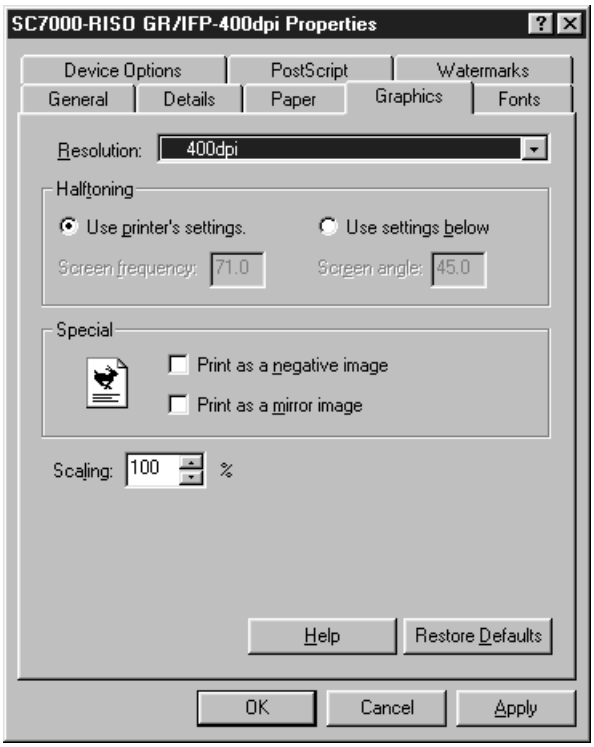

Figure 6.32: PostScript Printer Driver Setup / Graphics Tab (Windows 95)

Resolution should match the resolution of your RISOGRAPH for best print quality of images, but a lower **Resolution** may accelerate printing. In most cases, the best choice is not to change the default **Resolution**.

Halftoning specifies values for the number of lines per inch (frequency) and the angle of the pattern desired for halftone screens.

The **Special** option allows to print as a negative image or as a mirror image. **Negative image** printing is useful only for black-and-white or coarse RGB images.

The **Scaling** option allows the page to be rescaled from 10% to 400%.

6.2.2.5 The Fonts Tab

The **Fonts** tab provides three options for printing text with the desired fonts.

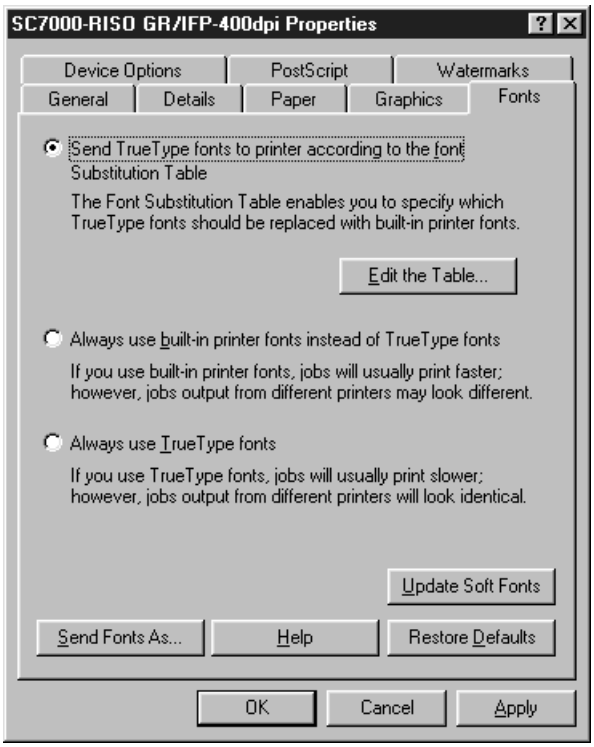
SC7000-RISO GR/IFP-400dpi Properties
Device Options
PostScript
Watermarks
General
Details
Paper
Graphics
Fonts
Send TrueType fonts to printer according to the font Substitution Table
The Font Substitution Table enables you to specify which TrueType fonts should be replaced with built-in printer fonts.
Edit the Table...
Always use built-in printer fonts instead of TrueType fonts
If you use built-in printer fonts, jobs will usually print faster; however, jobs output from different printers may look different.
Always use TrueType fonts
If you use TrueType fonts, jobs will usually print slower; however, jobs output from different printers will look identical.
Update Soft Fonts
Send Fonts As...
Help
Restore Defaults
OK
Cancel
Apply

Figure 6.33: PostScript Printer Driver Setup / Fonts Tab (Windows 95)

The **Send TrueType fonts to printer according to the font Substitution Table** option let the Adobe Printer Driver to use the value specified in the **Font Substitution Table** to determine which PostScript fonts to substitute for TrueType fonts. Instead of sending all TrueType fonts to your printer, this option substitutes a PostScript printer font for the common TrueType fonts used in your document. This can accelerate printing.

By default, common TrueType fonts are substituted with their PostScript look-alike are sent to the printer in the format specified in the Send True Type Fonts As box of the **Send Fonts As** dialog box. Click the **Edit the Table** to customize the TrueType fonts sent and the printer fonts substituted for TrueType fonts.

The Always use built-in printer fonts instead of TrueType fonts option causes the Adobe Printer Driver to ignore the Font Substitution Table and not to download any fonts, even those not built into the SC7000. Checking this option may ensure the fastest performance but frequently sacrifice typographic quality.

Select the **Always use TrueType fonts** option to send TrueType fonts to the printer when printing a document. This ensures that the same fonts are used on the printed document as those on your screen, but printing may take longer with this option. The TrueType fonts are sent in the format specified in the **Send TrueType fonts as** box of the **Send Fonts As** dialog box.

6.2.2.5.1 The Font Substitution Table

Click the **Edit the Table** button to view or edit the **Font Substitution Table**.

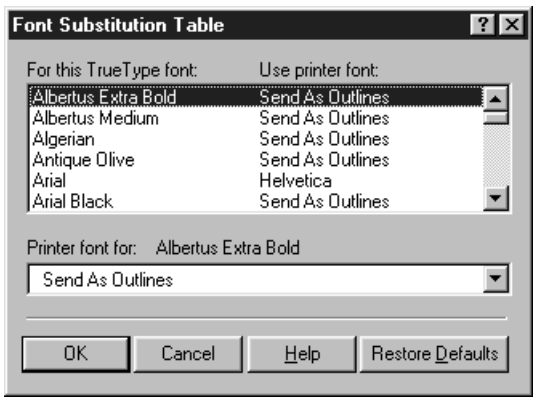

Figure 6.34: PostScript Printer Driver Setup / Edit The Table Dialog Box

The **Font Substitution Table** allows you to view a list of all TrueType fonts installed in your system and to select which, if any, PostScript font is substituted for each TrueType font. Click the TrueType font to be changed, then open the list below and click the new substitution.

To save the change, click the **OK** button to return to the **Fonts** tab.

To cancel, click the **Cancel** button.

To set the values of the **Font Substitution Table** at default values, click **Restore Defaults** button. Click the **Update Soft Fonts** button to update the list of installed PostScript fonts. This option applies only to PostScript Type 1 fonts.

6.2.2.5.2 The Send TrueType Fonts as Option

To specify how to send True Type or PostScript fonts, click **Send Fonts As** button.

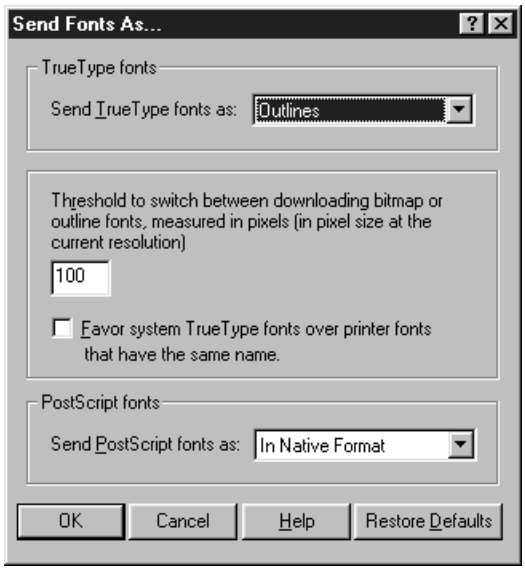
Send Fonts As...
TrueType fonts
Send TrueType fonts as:
Outlines
Threshold to switch between downloading bitmap or outline fonts, measured in pixels (in pixel size at the current resolution)
100
Favor system TrueType fonts over printer fonts that have the same name.
PostScript fonts
Send PostScript fonts as:
In Native Format
OK
Cancel
Help
Restore Defaults

Figure 6.35: PostScript Printer Driver Setup / Send Font as Dialog Box

If any TrueType font is not substituted with its PostScript equivalent, in the **TrueType fonts** area, select the format to send True Type fonts.

For scalable outlines (Type 1), which are best for large point sizes, click **Outlines**; note that the driver may automatically switch to bitmaps if the point size is too small. For bitmaps (Type 3), which are best for small point sizes, click **Bitmaps**. Click **Type 42** (recommended) for Type 42 format to maximize type quality. No TrueType fonts are sent if **Don't Send** is specified; this option is recommended only for advanced users using sophisticated print spoolers.

If **Outlines** is selected in the **Send TrueType Fonts As** option described above, enter the size of the font (in pixels) at which the Postscript driver should switch from sending TrueType fonts as outline (Type 1) fonts to sending them as bitmap (Type 3) fonts. The most efficient threshold value varies depending on the font complexity. For example, at 600 dpi, it becomes more efficient to start sending TrueType fonts as outlines when non-ornamental fonts are about 14 points or larger. Outline (Type 1) fonts are always sent if this value is 0.

If you may want to use system TrueType fonts, even though the same fonts are found on both the computer and the printer, click the Favor system TrueType fonts over printer fonts with the same name option.

If the **Send PostScript Fonts As** option is set to **In Native Format**, the PostScript font files are sent to the printer before printing.

This option does not affect the sending of TrueType fonts.

To save the change, click the **OK** button to return to the **Fonts** tab.

To cancel, click the **Cancel** button.

Click **Restore Defaults** button to set the values of the **Font Substitution Table** to default values.

6.2.2.6 The Device Options Tab

Click the **Device Options** tab to configure the printer driver for your RISOGRAPH.

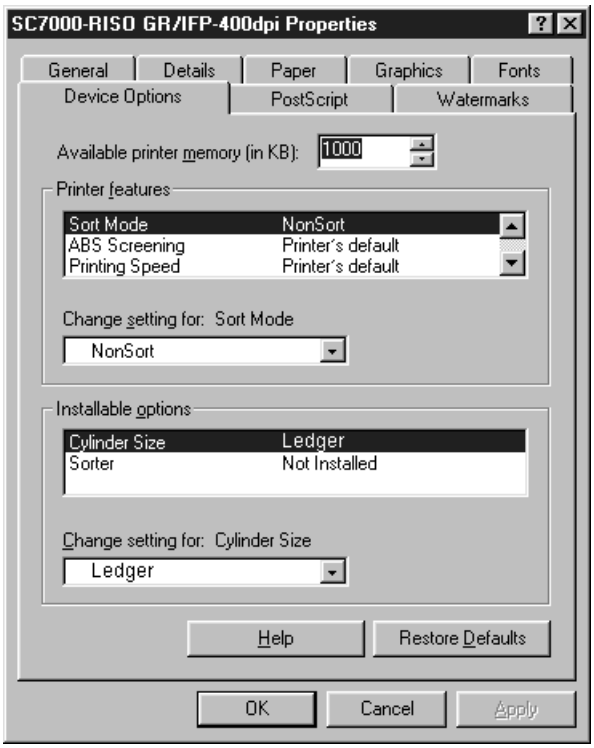

Figure 6.36: PostScript Printer Driver Setup / Device Options Tab (Windows 95)

The **Available printer memory** option specifies available printer memory. If the value does not correspond to the amount of printer memory, the size of memory available to your printer must be adjusted.

Select the **Cylinder Size** according to the cylinder which is installed in your RISOGRAPH.

Select **Installed** or **Not Installed** from the **Sorter** options, depending on the configuration of your RISOGRAPH.

If there is a sorter installed, select the **Sort Mode**. Choose between **Sort**, **Group**, **Stack** or **None**. **None** causes the sorter to use its output tray. See the sorter's user manual for more information about Sort Modes.

After changing the **Cylinder Size**, always check the **Paper Size** option on the **Paper** file card. If the new cylinder does not support the previously selected **Paper Size**, select a new **Paper Size** which is supported by the cylinder.

For descriptions of other options, please refer to the *SC7000 User Manual*.

6.2.2.7 The PostScript Tab

The **PostScript** tab allows several PostScript options to be set. In most cases, no change to these settings is necessary.

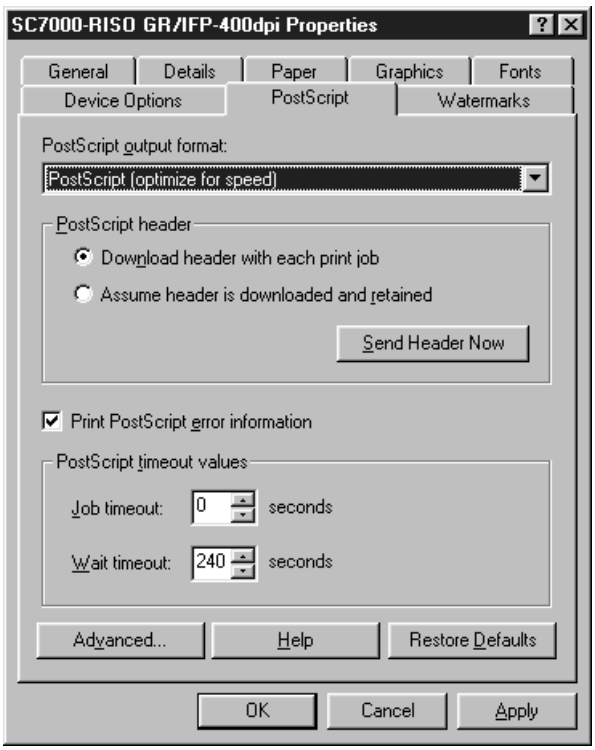

Figure 6.37: PostScript Printer Driver Setup / PostScript Tab (Windows 95)

Use the **PostScript output format** option to select **PostScript (optimize for speed)**, **PostScript (optimize for portability - ADSC)**, **Encapsulated PostScript (EPS)**, and **Archive format**.

Optimize for speed causes the printer driver to produce PostScript data which prints fast, but this option may require more memory. **Optimize for speed** is the recommended setting. Select **Optimize for portability** only if printing problems which may be caused by memory limitations are encountered. **Encapsulated PostScript (EPS)** is only useful for printing to a file and is restricted to one-page documents. The **Archive format** option improves file portability by suppressing many of the printer settings which may prevent the file from printing.

The **PostScript header** is a piece of PostScript data needed to print PostScript documents created by the printer driver.

Select **Download header with each print job** to automatically send the PostScript header prior to each document. Alternatively, click the **Send Header Now** button to download the PostScript header to the SC7000. Then, select **Assume header is downloaded and retained** to tell the driver not to send a PostScript header with each document.

Downloading the PostScript header once saves some time, but note that the header must be downloaded again after restarting the SC7000. It is therefore more reliable to choose the Download Each Job setting.

Click the **Print PostScript error information** option to send the error handler with each print job This option may be helpful if a PostScript document fails to print. The error handler is a PostScript program which prints some error information in case of a PostScript error.

Job time-out specifies the maximum execution time of a print job until the job is automatically aborted. A value of 0 indicates that the job is never aborted.

Wait time-out specifies the maximum time for the SC7000 to wait for additional data of a print job. 0 indicates unlimited waiting. In rare cases, some Windows application programs may require **Wait time-out** values of several minutes when data transmission is interrupted due to extended internal computations.

Advanced and experienced users may click the **Advanced PostScript Options** button to view and change advanced PostScript settings.

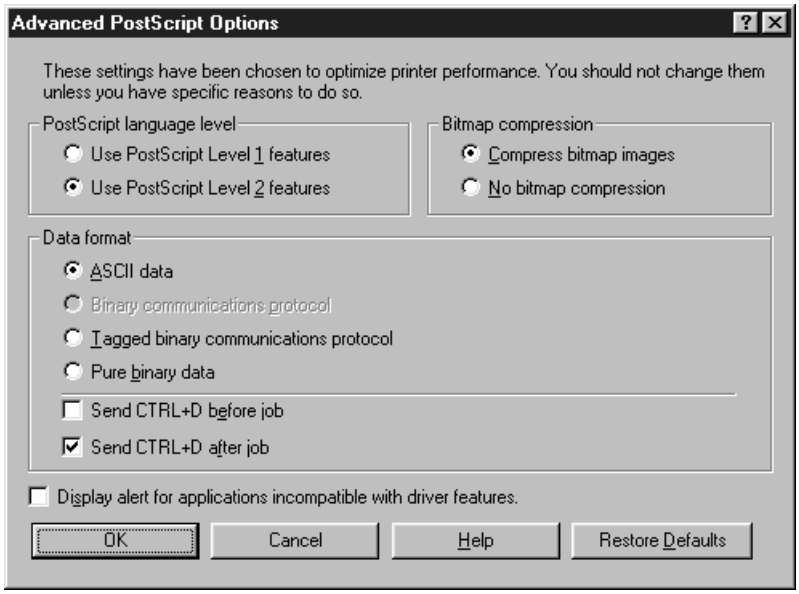
Advanced PostScript Options
These settings have been chosen to optimize printer performance. You should not change them unless you have specific reasons to do so.
PostScript language level
Use PostScript Level 1 features
Use PostScript Level 2 features
Bitmap compression
Compress bitmap images
No bitmap compression
Data format
ASCII data
Binary communications protocol
Tagged binary communications protocol
Pure binary data
Send CTRL+D before job
Send CTRL+D after job
Display alert for applications incompatible with driver features.
OK
Cancel
Help
Restore Defaults

Figure 6.38: PostScript Printer Driver Setup / Advanced PostScript Options dialog box (Windows 95)

PostScript language level distinguishes PostScript Level 1 and Level 2. The use **PostScript Level 2 features** tells the driver to generate PostScript Level 2 data. It is recommended to use this setting because PostScript Level 2 code often prints faster than PostScript Level 1 data.

In the **Bitmap Compression** box, change bitmap compression, if necessary. Use this advanced feature only if a Level 1 printer connected through a COMn port is being used.

In the **Data Format** box, specify the format in which to send data to the printer. Note that not all printers support all formats.

Use the **ASCII Data** option to send all data in Adobe Communication Protocol. The **ASCII Data** format allows the file to print on any printer.

Use the **Tagged Binary Communications Protocol** option to send all data except special characters in binary (8-bit) format over parallel or serial ports.

Use the **Pure Binary Data** option to send all data in pure binary format. This is the fastest format for printing, but can be sent only over Ethernet.

If you are printing to disk and the **Archive format** option is selected or the document contains an **Encapsulated PostScript (EPS)** file that might be printed on a printer that does not support binary communication, binary communication should be turned off. The Adobe Printer Driver does this automatically for the duration of the print job.

In the **Data Format** box, make adjustments when the reset-memory code **CTRL+D** is sent to the printer, if necessary. This option may be important for batching or trouble-shooting situations. The default option **Send CTRL+D after job** is generally the better choice.

Certain applications may be incompatible with the Adobe Printer Driver. With those applications, you will be unable to use some Adobe Printer Driver features. For a list of incompatible applications, see the Adobe Printer Driver ReadMe file.

If the **Display alert for application incompatible with driver features** option is turned on in the **Advanced PostScript Options** dialog box, the Adobe Printer Driver displays an alert message providing options when driver features (such as N-up, Watermarks, Negative Image, Mirror Image, or Scaling) are incompatible with the application being used.

6.2.2.8 The Watermarks Tab

The **Watermarks** tab dialog box enables you to specify watermarks for your documents. A watermark will print at a certain place on each page of a document if it is selected from the **Select a watermark** field.

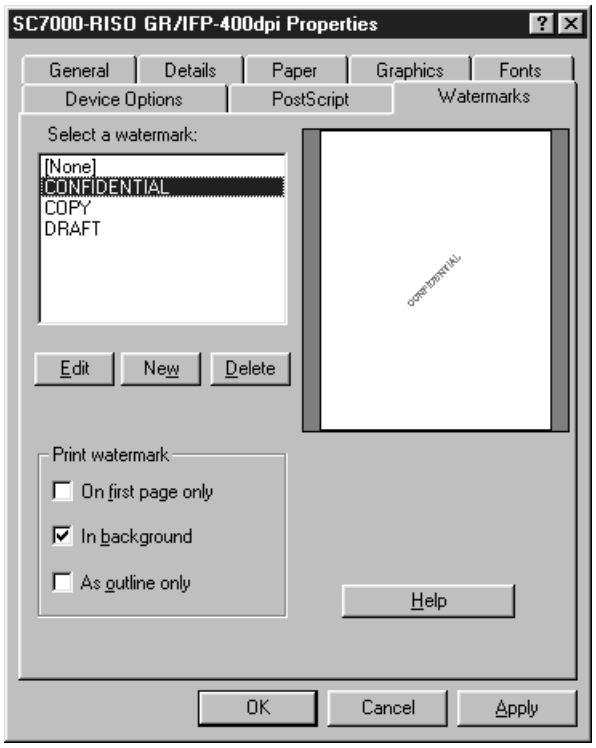

Figure 6.39: PostScript Printer Driver Setup / Watermarks Tab (Windows 95)

Choose a watermark for editing from the **Select a watermark** list.

Click **Edit** to access the **Edit Watermark** dialog box. The **Edit Watermark** dialog box offers several features for editing the **Text** of the watermark and selecting **Font**, font **Size**, font **Style**, **Angle**, **Color** and **Position** of the text. You may also specify whether to print the watermark in the foreground or background and whether to fill the text or to print outlines only.

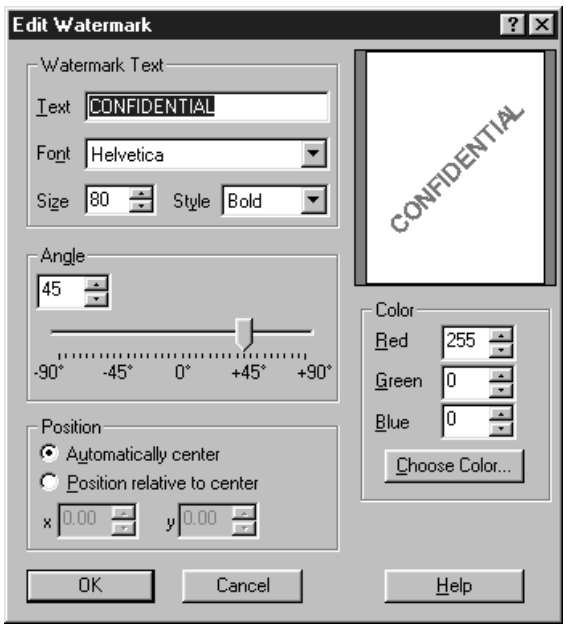

Figure 6.40: Edit Watermark Dialog Box (Windows 95)

Click **OK** to return to the **Watermark** tab dialog box. The **New** button allows a new watermark to be added to the list. Click the **New** button to open the **Edit Watermark** dialog box described above.

Click **Delete** to remove the selected watermark from the **Select a watermark** list.

In the **Print watermark** box, select how the watermark is printed.

Watermarks are generally printed on all document pages. To print the watermark only on the first page, click **On first page only**.

Depending on the document graphics, you might choose to print the watermark **In background** or **As outline only**.

Click **OK** to exit the **Printer Driver Setup** dialog box when the setup of the SC7000 printer driver is completed.

6.2.3 PCL Printer Driver for Windows 3.1x

To access the SC7000 PCL printer driver for setup, use one of the following procedures:

1. From the **Program Manager**, double-click the **Control Panel** which is located in **Main**. Double-click Printers. In the **Printers** dialog box, select the SC7000 PCL printer from the list of **Installed Printers** and click **Setup**.
2. Alternatively, double-click **Print Manager** located in **Main**. Choose **Install** from the **Options** Menu. In the **Printers** dialog box, select the SC7000 PCL printer from the list of **Installed Printers** and click **Setup**.
3. In addition, some applications provide a **Print Setup** item in the **File** menu which may also lead to the printer driver.

6.2.3.1 The Setup Dialog Box

The **Setup** dialog box appears with the name of the printer on the title bar.

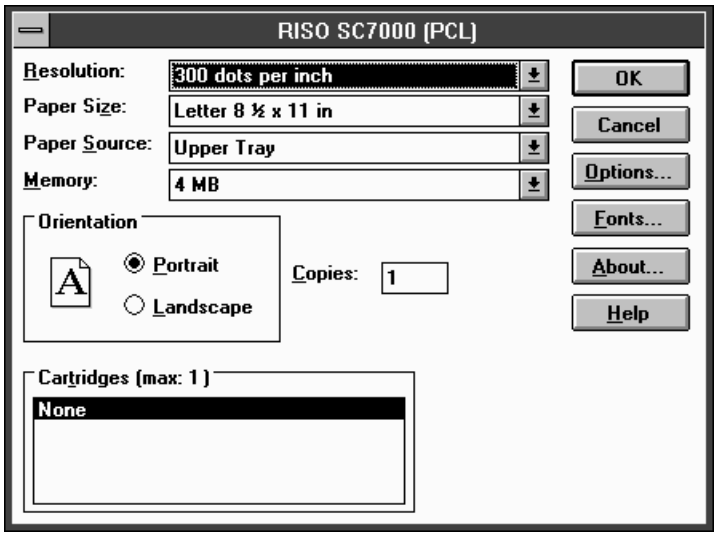

Figure 6.41: PCL Printer Driver / Setup Dialog Box (Windows 3.1x)

The **Setup** dialog box offers the following options:

The **Resolution** should be 300 dots per inch for best print quality of images, but a lower **Resolution** may accelerate printing. In most cases, the best choice is not to change the default **Resolution**.

Select a **Paper Size** corresponding to the paper in the RISOGRAPH's paper feed tray.

The **Paper Source** cannot be changed because the RISOGRAPH offers single paper feed tray.

Memory is the installed memory of the SC7000. The **Memory** value must be the same as displayed by the SC7000 utility software or printed on the SC7000 self test page.

Click either **Portrait** or **Landscape** to select the **Orientation** of the printed page. Please refer to the *SC7000 User Manual* for a discussion of orientation versus feed direction.

Always select the number of copies in the **Print** dialog box of your application program. In this case, the **Copies** count should remain at 1.

Use the **Cartridges** option to select the desired cartridges from the list. The cartridges must be installed in your printer's cartridge slots before you can select them.

If the cartridge fonts are not listed, install them first by choosing the **Fonts** button and then completing the **HP Font Installer** dialog box. If the Fonts button is unavailable, you need to install the cartridge fonts using the method described by the font manufacturer.

6.2.3.2 The Options Dialog Box

Click the **Options** button from the **Setup** dialog box to setup the other options.

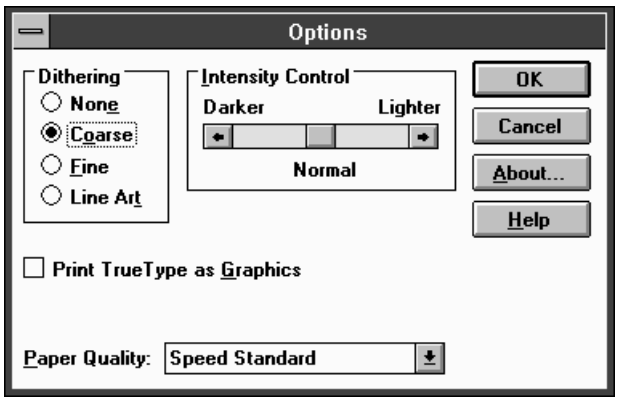

Figure 6.42: PCL Printer Driver / Options Dialog Box (Windows 3.1x)

Dithering refers to the method used by the printer driver to simulate shades of grey. Choose between **Coarse**, **Fine**, **Line Art** and **None**.

Coarse or **Fine** depending on the desired **Resolution** can be used in many cases. **Line Art** is intended for printing artwork with sharp borders between different levels of grey. Selecting **None** causes the printer driver to print black and white only.

The **Intensity Control** specifies how light or dark graphic images will print. Move the slider to select a suitable setting. Note that **Intensity Control** refers only to the printer driver's method to produce grey-shaded images. It should not be confused with the Print Density of the RISOGRAPH.

For printing artwork with just a few characters of a TrueType font, click the **Print TrueType as Graphics** option.

Select the print speed from the **Paper Quality** option pull-down menu. The print speed selected from the computer must be supported by your RISOGRAPH model, or the **Paper Quality** option will be ignored.

6.2.3.3 The HP Font Installer Dialog Box

Click **Fonts** from the **Setup** dialog box to access the **HP Font Installer** dialog box. This PCL font downloader may be used for scalable PCL fonts in the Agfa Compugraphic's FAIS format and for bitmapped PCL fonts, but it cannot be used for TrueType fonts.

Make sure that the printer driver and port are already setup in order to use the font downloader.

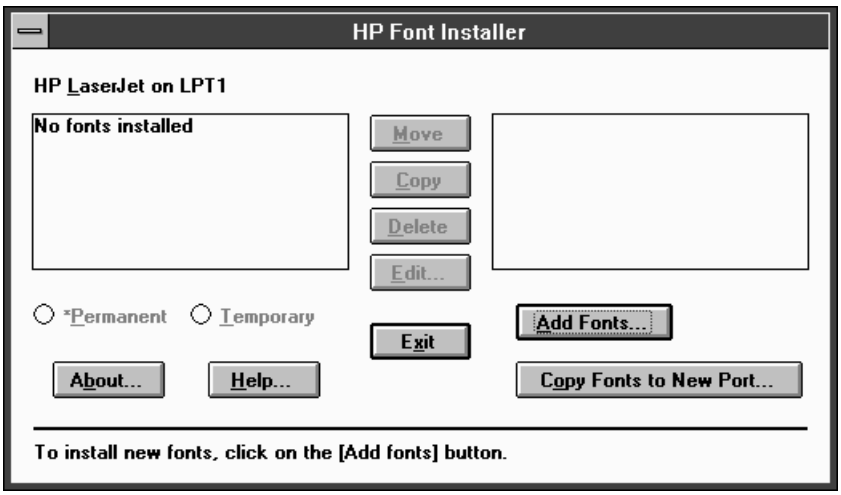

Figure 6.43: PCL Printer Driver / HP Font Installer (Windows 3.1x)

PCL fonts cannot be downloaded to the printer's disk independently of the **Permanent** or **Temporary** setting of the font downloader. For this reason, downloaded PCL fonts are deleted when the SC7000 is switched off or restarted.

The PCL font downloader uses a two-step method to make PCL fonts available to the SC7000. The first step installs a font in your computer, and the second step downloads an installed font to the SC7000.

When installing scalable fonts, you have to install AutoFont Support files and make scalable printer fonts according to the instructions included in your font package before you continue. Return to the **HP Font Installer** dialog box and click **Add Fonts** to install PCL fonts to download to the SC7000 on your computer. Enter the path where the bitmap fonts or AutoFont Support files are located and click **OK**.

Select the desired fonts for installation from the list on the right of the **HP Font Installer** dialog box. Click the **Add** button. Enter the destination path, e.g. C:\PCLFONTS, and click **OK**.

Installed fonts appear in the list on the left. If you do not need an installed font any longer, select the font from the list and click **Delete**. You will be asked if you want to delete the font from your computer's hard disk or just remove it from Windows.

Make sure that all installed fonts differ in their names. Different fonts look differently even if they have the same name. To change a font name, select the font from the list on the left and click **Edit**. Make the necessary changes and click **OK**.

Click **Exit** when font installation is completed.

The list on the left of the **HP Font Installer** dialog box displays the fonts which are already installed in your computer and are therefore ready to be downloaded.

Select one font at a time from the list and click either **Permanent** or **Temporary** to determine how to download the font. **Permanent** fonts are permanently stored in the memory of the SC7000 and therefore immediately available for printing. **Temporary** fonts are downloaded only when they are needed to print a document. Both **Permanent** and **Temporary** fonts will be deleted when the SC7000 is switched off or restarted.

Downloading frequently used fonts as **Permanent** is recommended because it speeds printing, but it consumes additional memory. Therefore, select **Temporary** if you encounter problems when printing complex pages or documents containing many different fonts. Also, choose **Temporary** for all rarely used fonts. Click **Exit** after selecting **Permanent** or **Temporary** for each of the fonts. If there are any **Permanent** fonts in the list, select whether to download the fonts immediately or at startup of your computer. Keep in mind that the SC7000 must be switched on and idle whenever fonts are downloaded, even if this is done automatically when your computer starts up.

Moving or copying fonts may be useful if the port used to connect the SC7000 to your computer is changed or if you use another PCL printer in addition to the SC7000.

To move or copy fonts from one port to another port, click **Copy Fonts To New Port**, select the new port and click **OK**. The font list on the right of the **HP Font Installer** dialog box is now associated with the new port.

Select one or more fonts from one of the two font lists. Click **Move** or **Copy** to move or copy the selected fonts to the other port. Select **Permanent** or **Temporary** for each of the moved or copied fonts as explained above.

Click **End Copy Fonts To New Port** to return to the previous dialog box or click **Exit** to quit the **HP Font Installer** dialog box.

6.2.4 PCL Printer Driver for Windows 95

To access the SC7000 PCL printer driver in order to set it up, click the **Start** button in the lower left corner of the screen. Select **Settings**, then select **Printers**. In **Printers**, select the SC7000 PCL printer icon. Click **Properties** from the **File** menu.

A variety of tabs is visible on top of the printer driver's dialog box. The tabs are denoted **General**, **Details**, **Paper**, **Graphics**, **Fonts** and **Device Options**. Clicking one of the tabs makes the respective file card the uppermost on the stack.

Most of the tabs provide a **Restore Defaults** button which can be used to revert all settings to the original values. From any one of the tabs, you may either click **OK** to save your changes and leave the driver, click **Cancel** to leave without saving or click **Apply** to save all changes without leaving the printer driver.

The configuration options of each of the tabs will be discussed in the following paragraphs:

6.2.4.1 The General Tab

The **General** tab offers the following options:

Figure 6.44: PCL Printer Driver / General Tab (Windows 95)

Enter a **Comment** in the respective box if you find it useful to describe your specific printer configuration here.

You may want to select a **Separator page** which will be inserted between each of your printed documents. Choose between a **Full** page containing graphics, a **Simple** text-only page or click **Browse** to select any other page in Windows metafile format. Since each separator page consumes additional master material, it is recommended to select **none**.

Click **Print Test Page** to print a test page. This may help you to verify your printer driver setup. Note that several other test pages for the SC7000 can be printed by means of the SC7000 utility software.

6.2.4.2 The Details Tab

Select the **Details** tab to configure the port which is used by your computer for printing to the SC7000.

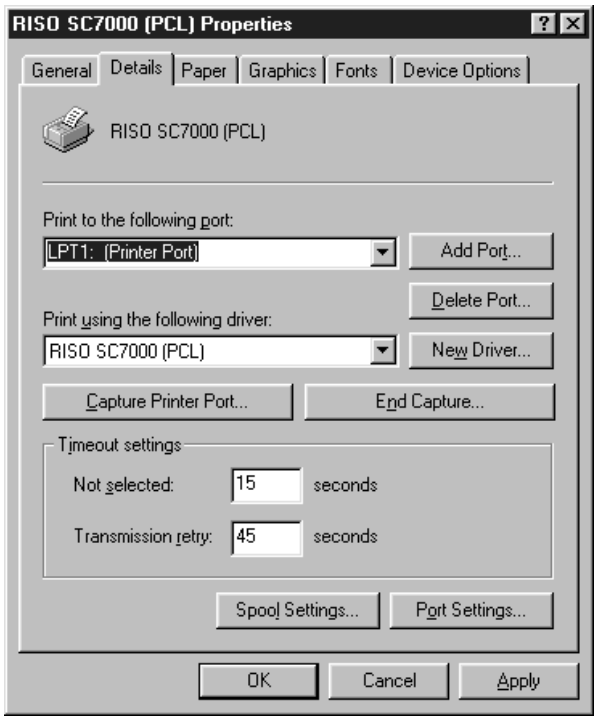

Figure 6.45: PCL Printer Driver / Details Tab (Windows 95)

Select the port which is used to connect the SC7000 to your computer from the **Print to the following port** pull-down menu. Alternatively, click **Add Port** to specify a different port or network path. Click **Delete Port** to delete a port from the **Print to the following port** list.

If you want to select a different printer driver, either choose the driver from the **Print using the following driver** pull-down menu or click **New Driver** to select a driver which is not listed. Since the SC7000 PCL driver is the only PCL printer driver recommended for use with the SC7000, do not use this option.

Capture Printer Port may be used to map a port to a network path. **End Capture** removes the mapping of a port to a network path. You do not need these options if the SC7000 is directly connected to your computer.

Timeout settings specify how long Windows waits for the SC7000 in certain situations. **Not selected** is the time Windows waits for the SC7000 to be online. **Transmission retry** is the time Windows waits for the SC7000 to be ready to print. Note that these **Timeout settings** are different from the timeouts which can be configured by means of the SC7000 utility because they specify how long Windows waits for the SC7000, not vice versa.

Click **Spool Settings** to configure your computer in order to spool print data on the hard disk for background printing. Furthermore, it is most important to enable bi-directional communication by means of the **Spool Settings** dialog box. Make sure to select **Enable bi-directional support for this printer** from the **Spool Settings** dialog box.

Port Settings allow to enable print spooling for MS-DOS-based application programs and to enable checking of the port state prior to printing.

To use bi-directional communication with the application program, select the **Print directory to the printer**.

6.2.4.3 The Paper Tab

Choose the **Paper** tab to select print media options.

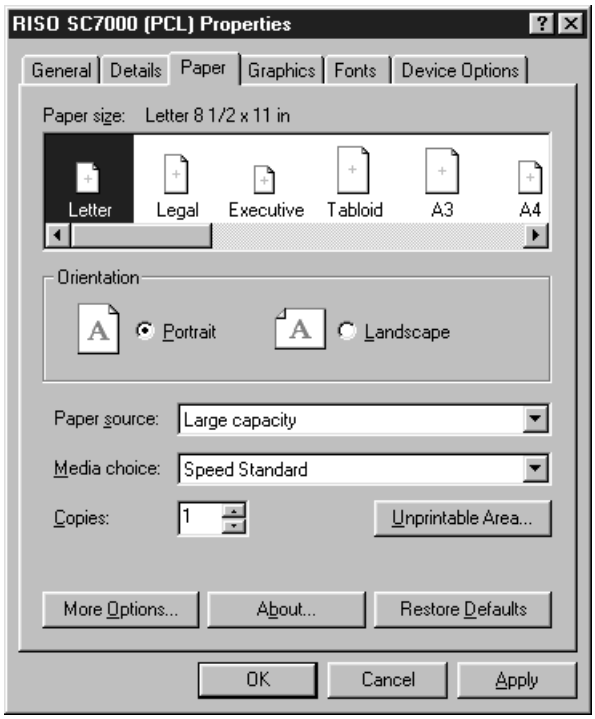

Figure 6.46: PCL Printer Driver / Paper Tab (Windows 95)

Click the desired **Paper size** which must match the paper in the RISOGRAPH's paper feed tray.

Click either **Portrait** or **Landscape** to select the **Orientation** of the printed page. Please refer to the *SC7000 User Manual* for a discussion of orientation versus feed direction.

The **Paper source** cannot be changed because the RISOGRAPH does not have more than one paper feed tray.

Select the print speed from the **Media choice** pull-down menu. Selecting the print speed from the computer must be supported by your RISOGRAPH model, otherwise the **Media choice** will be ignored.

Always select the number of copies from within the **Print** dialog box of your application program. In this case, it is important to leave the **Copies** count of the printer driver's **Paper** tab as 1.

Click **Unprintable Area** if you want to see the non-printable margins at the edges of the selected paper. It is recommended not to change the default values because they are optimized for best results with your RISOGRAPH.

Click **More Options** to select a Sort Mode, provided that a sorter is connected to your RISOGRAPH. Select **Printer's Default** from the **Output Bin** pull-down menu if you want to use the default Sort Mode which is set by means of the SC7000 utility software. Alternatively, select one of the Sort Modes **Sort**, **Group**, **Stack** or **NonSort**. Please refer to your sorter's documentation for a description of the Sort Modes.

6.2.4.4 The Graphics Tab

The **Graphics** tab offers some options which affect the quality of graphic images.

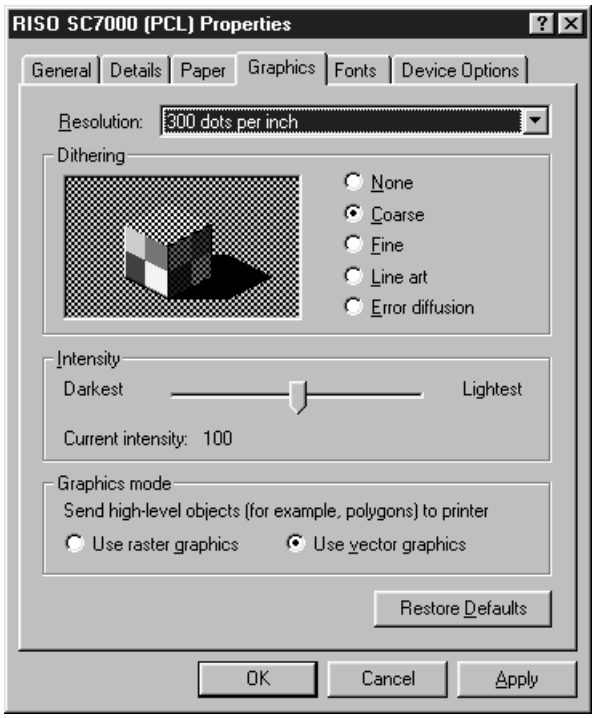

Figure 6.47: PCL Printer Driver / Graphics Tab (Windows 95)

Resolution should be 300 dots per inch for best print quality of images, but a lower **Resolution** may speed printing. In most cases, the best choice is not to change the default **Resolution**.

Dithering refers to the method which is used by the printer driver to simulate shades of grey. Choose between **Coarse**, **Fine**, **Line art**, **Error diffusion** and **None**.

Coarse or **Fine** can be used in many cases, which one to prefer depends on the **Resolution**. **Line art** is intended for printing artwork with sharp borders between different levels of grey. **Error diffusion** is recommended for photographic images which do not have sharp edges between different grey shades. **None** causes the printer driver to print black and white only.

The **Intensity** specifies how light or dark graphic images will print. Move the slider to select a suitable setting. Note that **Intensity** refers only to the printer driver's method to produce grey-shaded images. It should not be confused with the **Print Density** of the RISOGRAPH.

The **Graphics mode** determines if objects such as polygons will be sent to the SC7000 as raster graphics or vector graphics. Select **Use vector graphics** in order to speed printing. If you encounter printing problems like incorrect overlaying, select **Use raster graphics**.

6.2.4.5 The Fonts Tab

Click the **Fonts** tab to configure the printer driver's handling of **TrueType fonts** or to manually download PCL fonts.

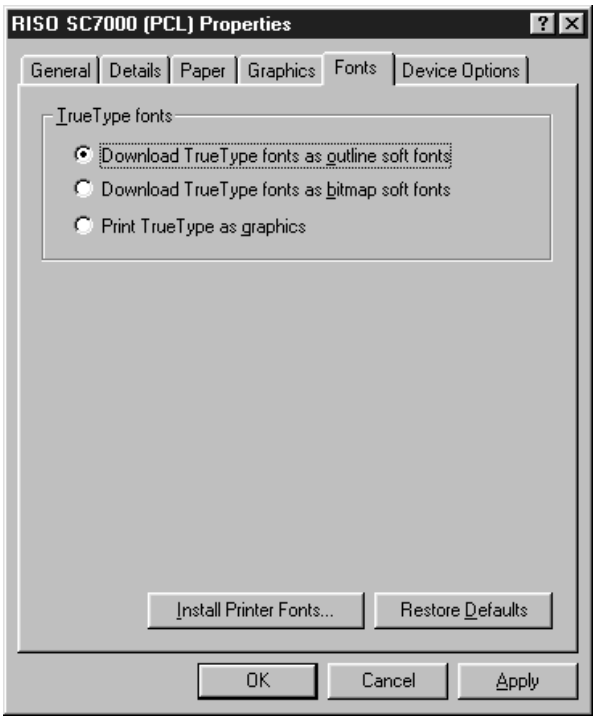

Figure 6.48: PCL Printer Driver / Fonts Tab (Windows 95)

Choosing **Download TrueType fonts as outline soft fonts** will speed up printing of TrueType text-based documents in most situations. If you use TrueType fonts of only one or few different point sizes in your document, you may prefer to select **Download TrueType fonts as bitmap soft fonts**.

For printing artwork with just a few characters of a TrueType font, select **Print TrueType as graphics**.

6.2.4.6 Font Downloader

Click **Install Printer Fonts** from the **Fonts** tab to access the **HP Font Installer** dialog box. This PCL font downloader can be used for scalable PCL fonts in Agfa Compugraphic's FAIS format and for bitmapped PCL fonts, but it cannot be used for TrueType fonts.

Make sure that the printer driver and port are already set up in order to use the font downloader.

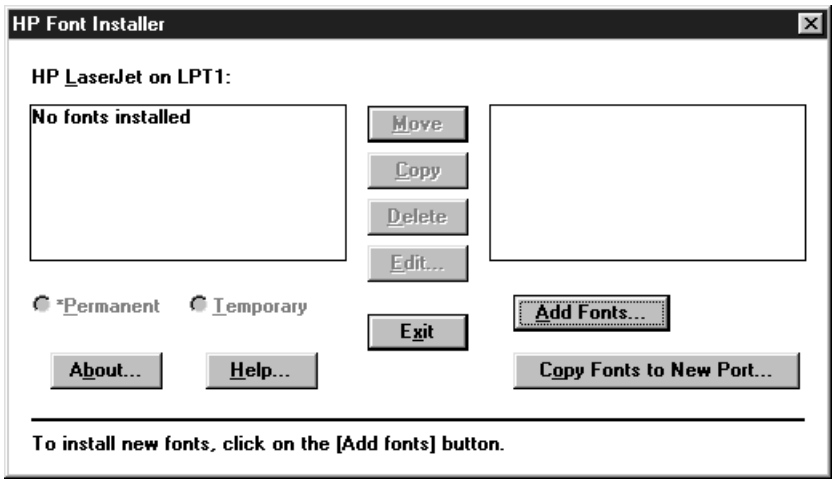

Figure 6.49: PCL Printer Driver / HP Font Installer (Windows 95)

PCL fonts cannot be downloaded to the printer's disk, independent of the **Permanent** or **Temporary** setting of the font downloader. For this reason, downloaded PCL fonts will be deleted when the SC7000 is switched off or restarted.

The PCL font downloader uses a two-step method to make PCL fonts available to the SC7000. The first step is to install a font on your computer, the second step is to download an installed font to the SC7000.

6.2.4.6.1 Installing Fonts

When installing scalable fonts, you have to install AutoFont Support files and make scalable printer fonts according to the instructions included in your font package before you continue.

Back to the **HP Font Installer** dialog box, click **Add Fonts** to install PCL fonts for download to the SC7000 on your computer. Enter the path where the bitmap fonts or AutoFont Support files are located and click **OK**.

Select the desired fonts for installation from the list on the right of the **HP Font Installer** dialog box. Click the **Add** button. Enter the destination path, e.g. C:\PCLFONTS, and click **OK**.

Installed fonts appear in the list on the left. If you do not need an installed font any longer, select the font from the list and click **Delete**. You will be asked if you want to delete the font from your computer's hard disk or just remove it from Windows.

Make sure that all installed fonts differ in their names. Different fonts look differently even if they have the same name. To change a font name, select the font from the list on the left and click **Edit**. Make the necessary changes and click **OK**.

Click **Exit** when you finished font installation.

6.2.4.6.2 Downloading Fonts

The list on the left of the **HP Font Installer** dialog box displays the fonts which are already installed on your computer and therefore ready for download.

Select each font separately from the list and click either **Permanent** or **Temporary** to determine how to download the font. **Permanent** fonts are permanently stored in the memory of the SC7000 and therefore immediately available for printing. **Temporary** fonts are downloaded only when they are needed to print a document. Both **Permanent** and **Temporary** fonts will be deleted when the SC7000 is switched off or restarted.

Downloading frequently used fonts as **Permanent** is recommended because it speeds printing, but it consumes additional memory. Therefore, select **Temporary** if you encounter problems when printing complex pages or documents containing many different fonts. Furthermore, choose **Temporary** for all fonts which are rarely used in your documents.

Click **Exit** after selecting **Permanent** or **Temporary** for each of the fonts. If there are any **Permanent** fonts in the list, you will be asked if you want to download the fonts immediately or at startup of your computer. Keep in mind that the SC7000 must be switched on and be idle whenever you download fonts, even if this is done automatically when your computer starts up.

6.2.4.6.3 Moving Fonts

Moving or copying fonts may be useful if you change the port which is used to connect the SC7000 to your computer or if you use another PCL printer in addition to the SC7000.

To move or copy fonts from one port to another port, click **Copy Fonts To New Port**, select the new port and click **OK**. The font list on the right of the **HP Font Installer** dialog box is now associated with the new port.

Select one or more fonts from one of the two font lists. Click **Move** or **Copy** to move or copy the selected fonts to the other port. Select **Permanent** or **Temporary** for each of the moved or copied fonts as explained above.

Click **End Copy Fonts To New Port** to return to the previous dialog box or click **Exit** to quit the HP Font Installer dialog box.

6.2.4.7 The Device Options Tab

Select the **Device Options** tab to change the **Print Density** and to configure the usage of printer memory.

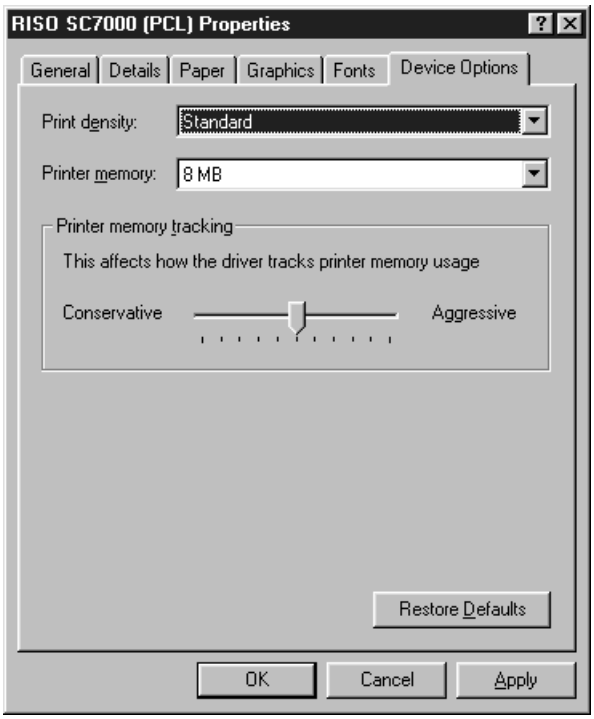

Figure 6.50: PCL Printer Driver / Device Options Tab (Windows 95)

The RISOGRAPH's **Print Density** may be set by means of the **Print Density** pull-down menu. Select **Lightest**, **Light**, **Standard**, **Dark** or **Darkest**.

Printer memory is the installed memory of the SC7000. The value of **Printer memory** must be the same as displayed by the SC7000 utility software or printed on the SC7000 self test page.

Printer memory tracking determines the way how the printer driver estimates the required amount of printer memory for a certain document. Based upon this estimate the driver decides if a document can be printed or not.

If the setting is more **Conservative**, it is more likely that the driver does not print a complex document. Move the slider towards the **Aggressive** setting to try printing the document anyway, but be aware that the printer may run out of memory.

6.2.5 SC7000 Utility

The SC7000 utility is the primary tool to configure and maintain the SC7000.

The SC7000 utility consists of five menus called **File**, **Print**, **Setup**, **Maintenance** and **?**, the help menu. The **Maintenance** menu and parts of the **Setup** menu are for administrator use only and therefore not described in the *SC7000 User Manual*.

The printer driver must be installed and set up in order to use the SC7000 utility.

Some functions of the SC7000 utility require bi-directional communication, i.e. a back-channel to send data from the SC7000 back to your computer. The ability to communicate in both directions depends on computer hardware and operating system software.

If bi-directional communication is not supported, the SC7000 utility will display **Current** instead of a read-back value. Furthermore, **Current** may be selected by the user in certain situations instead of a value. This simplifies the procedure to change some settings from a dialog box without touching the others. If you want to change one item in a dialog box, select **Current** for all other items to ensure that they remain unchanged.

If you need to know the current settings of the SC7000 but bi-directional communication is not supported by your system, print the **Settings Page** from the **Print** menu of the SC7000 utility.

6.2.5.1 The File Menu

Before doing anything else with the SC7000 utility, select the current printer. Choose **Select Printer** from the **File** menu, select the SC7000 from the list of installed printers and click **OK**.

To download a PostScript file to the SC7000, select **Download File** from the **File** menu. Choose the desired PostScript file from the dialog box which appears on the screen. Click **Open** to start downloading the file.

Select **Manage Fonts** from the **File** menu to view, download or remove fonts of the SC7000. Choose **SC7000's Memory** to display a list of fonts in memory or **SC7000's Disk** to display a list of hard disk-resident fonts of the SC7000. Displaying a font list requires bi-directional communication between your computer and the SC7000.

See the section on typefaces of the *SC7000 User Manual* if you need more detailed information about the differences between fonts in memory and on disk.

Note that fonts can only be removed if they reside on the **SC7000's Disk**. To remove a font from disk, select the font from the displayed list of fonts and click **Remove**. If you wish to remove fonts from memory, the SC7000 must be restarted as described below.

To download fonts to memory or disk, click **Download**. Select either **SC7000's Memory** or **SC7000's Disk**, depending on the desired destination of your font download. **Add** or **Remove** selected font files to or from the **Fonts to download** list. Alternatively, click **Add all** to add all font files from the selected folder or click **Remove all** to clear the **Fonts to download** list. When you have finished building your list of **Fonts to download**, click **Download** to start downloading all fonts from the list.

Choose **Restart Printer** from the **File** menu if you want to restart the SC7000. Click **Restart** to confirm the message which appears on screen. Make sure that other users are not currently using the SC7000 before you attempt to restart it. After restarting the SC7000, all previously downloaded fonts will be removed from memory, but fonts on the printer's disk will not be affected.

Once you have finished your work with the SC7000 utility, select **Quit** from the **File** menu.

6.2.5.2 The Print Menu

The **Print** menu enables you to print six different built-in PostScript pages serving as an aid for setup and test of the SC7000.

Select **Self Test Page** to print the results of a self-test of the SC7000.

Choose **Settings Page** to print information about the current setup of the SC7000.

Choose **Font List Page** to print a list of currently installed PostScript fonts of the SC7000.

Select **Sample Page** to print a page containing text, artwork and images.

Select **PostScript Font Sample Page** to print a font list which shows each PostScript font using the original typeface.

Select **PCL Font Sample Page** to print a font list which shows each PCL font using the original typeface.

A brief description of each of the test and sample pages can be found in the appendix.

Note that the self-test page can also be printed without this utility and even without a computer. Please see the SC7000 operator panel section of the *SC7000 User Manual* for details.

6.2.5.3 The Setup Menu

The **Setup** menu is for use by the Technical Administrator to configure the SC7000. It is divided into five sections called **General**, **Printing**, **PostScript**, **Communication** and **LaserJet Emulation (PCL)**.

6.2.5.3.1 General

Select **General** to enter the **General** dialog box.

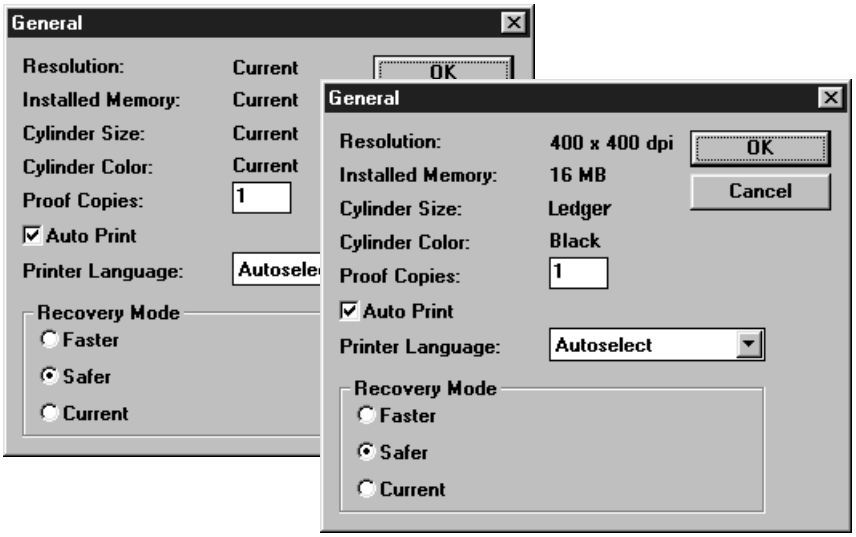

Figure 6.51: General Dialog Box (Windows)

The **General** dialog box displays the **Resolution** of the RISOGRAPH, the size of **Installed Memory** of the SC7000 as well as **Cylinder Size** and **Cylinder Color** of the RISOGRAPH. Note that the SC7000 detects the RISOGRAPH's **Cylinder Size** at startup, therefore this information may be out-of-date if somebody has changed the cylinder in the meantime.

Furthermore, the **General** dialog box allows the number of **Proof Copies** to be changed, the **Auto Print** mode to be disabled or enabled and the **Printer Language** and **Recovery Mode** to be set.

Printer Language enables you to manually switch between the **PostScript** interpreter and the **LaserJet Emulation** (PCL) of the SC7000. If **Auto Select** is set which is the recommended setting, the SC7000 will automatically determine if print data is in PostScript or PCL format. Some rare cases, e.g. printing a PostScript program listing, may require the Printer Language to be set manually.

The **Recovery Mode** determines the moment when the frame buffer of the SC7000 is cleared to compute the next page.

Faster causes the SC7000 to discard the contents of the frame buffer immediately after data transmission to the RISOGRAPH. The SC7000 begins to compute the next page while the RISOGRAPH is making the master. If the master jams, the error cannot be recovered and the page of the document must be printed later again.

If the **Recovery Mode** is **Safer**, the SC7000 stores the frame buffer until the master is completed and the RISOGRAPH starts printing. It will take some more time until the following page can be printed. If a jam occurs while making the master, the error can be recovered and a new master can be made immediately.

6.2.5.3.2 Printing

The **Printing** dialog box from the **Setup** menu lets you view and change the following settings:

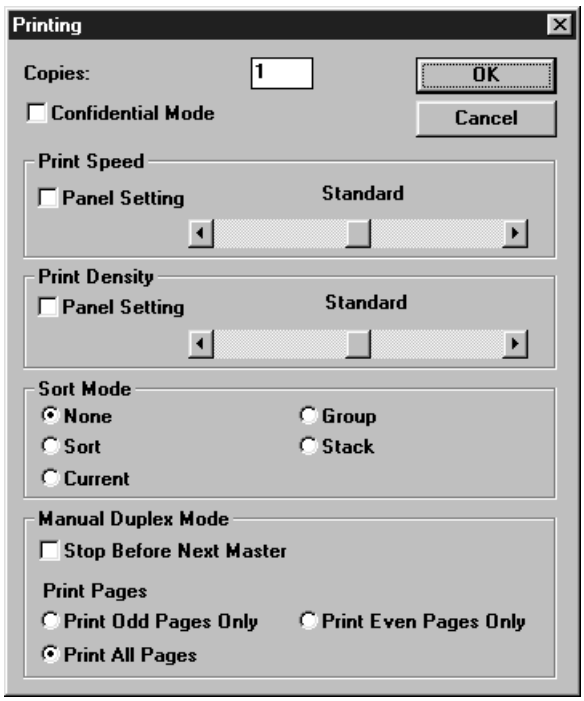

Figure 6.52: Printing Dialog Box (Windows)

The number of **Copies** overrides settings included in a PostScript document provided that **Copies** differs from 1, the default. Changing the number of **Copies** may be useful if a document is only available as a PostScript file for download and if the PostScript file does not specify the desired number of copies.

Usually, you will print from within an application program and select the number of copies in the **Print** dialog box of your application. In this case, it is important to leave the **Copies** setting in the **Printing** dialog box from the **Setup** menu as 1.

Confidential Mode is disabled by default. To enable **Confidential Mode**, check **Confidential Mode** in the **Printing** dialog box. The last master of your document will be immediately removed from the cylinder after printing if **Confidential Mode** is enabled.

Setting the **Print Speed** or **Print Density** in the **Printing** dialog box of the **Setup** menu has the same effects as setting print speed or print density from the RISOGRAPH's control panel. Move the respective slider to choose between **Slowest**, **Slow**, **Standard**, **Fast** and **Fastest** for the **Print Speed** and between **Lightest**, **Light**, **Standard**, **Dark** or **Darkest** for the **Print Density**. Alternatively, check **Panel Settings** to use those **Print Speed** or **Print Density** settings which are currently selected at the RISOGRAPH's control panel.

The **Sort Mode** selected in the **Printing** dialog box of the **Setup** menu overrides settings included in a PostScript document if different from **NonSort**, the default setting. Available **Sort Modes** are **NonSort**, **Sort**, **Group**, **Stack** and **Current**. Refer to your sorter's user manual for information about the Sort Modes.

It may be useful to set a **Sort Mode** if a document is only available as a PostScript file for download and if the PostScript file does not specify the Sort Mode. It may also be useful when printing from systems which do not allow PPD (PostScript Printer Description) files for the SC7000, e.g. MS-DOS.

Make sure to reset the **Sort Mode** to **NonSort** for normal operation.

Both the **Stop Before Next Master** and **Print Pages** in the **Manual Duplex Mode** field are important when printing multi-page documents.

The **Stop Before Next Master** is disabled by default. Enabling **Stop Before Next Master** generates all first page copies until the interface mode is reenabled. Choose from **Print Odd Pages Only**, **Print Even Pages Only** and **Print All pages** in the **Print Pages** field.

Check that the **Stop Before Next Master** and **Print Pages** are reset to default values for normal printing.

6.2.5.3.3 PostScript

Select **PostScript** from the **Setup** menu to change the following **PostScript** settings:

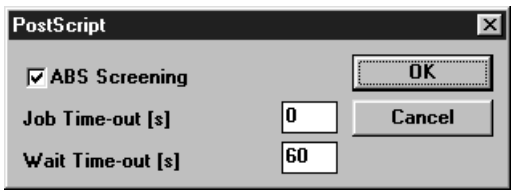

Figure 6.53: PostScript Dialog Box (Windows)

To print ABS (Adobe Brilliant Screens) frequency-modulated screens, **ABS Screening** must be enabled. If **ABS Screening** is checked, ABS is the PostScript default screen. If **ABS Screening** is unchecked, the SC7000 prints conventional screens only. Please refer to the section about screens of the *SC7000 User Manual* for a comparison between conventional and ABS screens.

The value of **Job Time-out** specifies (in seconds) the maximum execution time of a print job until the job is automatically aborted. 0, the default, means that the job is never aborted.

Wait Time-out specifies (in seconds) the maximum time while the SC7000 waits for additional data of a print job. 0 means unlimited waiting, 60 is the default. In rare cases, a higher value than 60 may be required.

6.2.5.3.4 Communication

The **Communication** dialog box from the **Setup** menu offers the following settings:

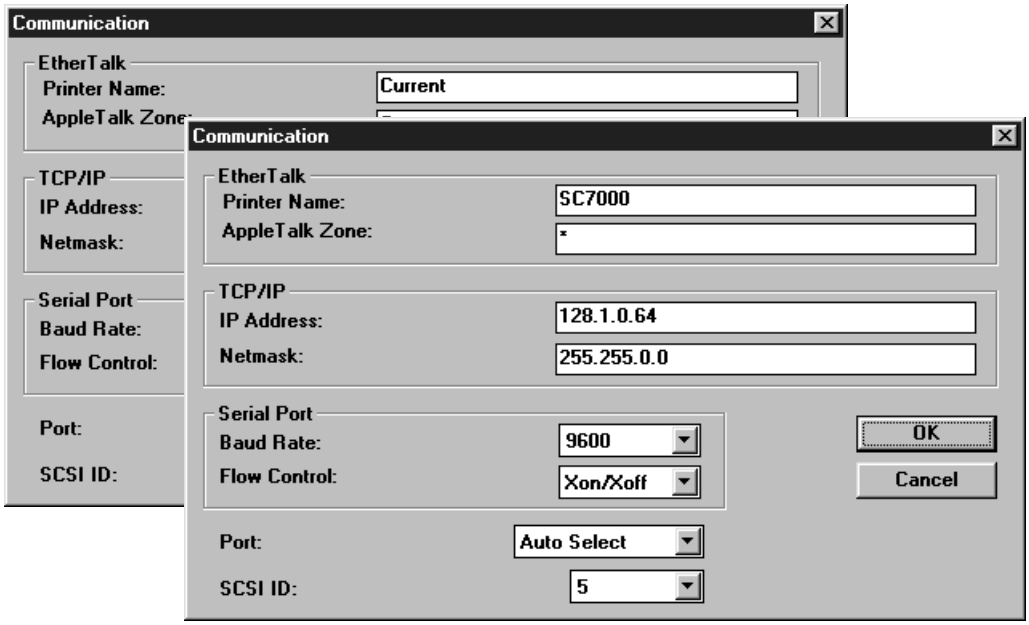

Figure 6.54: Communication Dialog Box (Windows)

In **EtherTalk** networks, the **Printer Name** of the SC7000 and the logical **AppleTalk Zone** where it resides may be changed.

When using the **TCP/IP** network protocol, the **IP Address** and the **Netmask** can be set. Changes of **TCP/IP** parameters will take effect after the next restart of the SC7000.

See the section on network protocols in this manual for information about how to set the parameters for EtherTalk and TCP/IP.

Furthermore, the **Communication** dialog box from the **Setup** menu allows the parameters for the **Serial Port** of the SC7000 to be changed. Note that any changes will immediately take effect. Therefore, communication will be interrupted if your computer is connected via the serial port.

The default **Baud Rate** is 9600, values between 600 and 38400 can be set.

Flow Control may be chosen from **DTR/DSR** (hardware handshake), **Xon/Xoff** (software handshake, the default setting) and **None**.

The hardware installation section in this manual contains additional information about the serial port of the SC7000.

The recommended **Port** setting is **Auto Select**. The SC7000 will automatically detect the active **Port** if **Auto Select** is enabled. If you prefer to determine one active **Port** manually, choose **EtherTalk**, **Parallel**, **Serial** or **TCP/IP**.

SCSI ID is the ID number of the SC7000 SCSI port which is used for scanning. Each device at the SCSI bus must have a unique **SCSI ID**. ID 7 is usually reserved for the host computer's SCSI port, ID 0 for the host computer's hard disk. The default **SCSI ID** of the SC7000 is 5. Setting another SCSI ID requires a restart of the SC7000 to take effect.

6.2.5.3.5 LaserJet Emulation (PCL)

Select **LaserJet Emulation (PCL)** from the **Setup** menu to set up the HP LaserJet emulation of the SC7000.

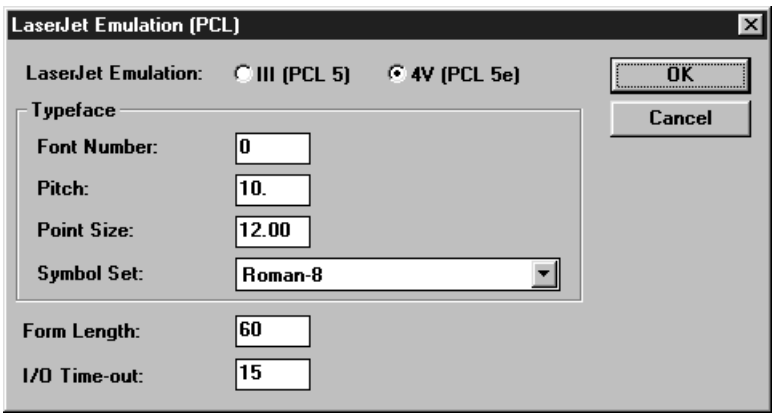

Figure 6.55: LaserJet Emulation (PCL) Dialog Box (Windows)

To select the desired **LaserJet Emulation**, click either **III (PCL 5)** for a HP LaserJet III printer emulation or **4V (PCL 5e)** to emulate a HP LaserJet 4V printer. The PCL (Printer Command Language) version is 5 for the LaserJet III and 5e for the LaserJet 4V printer emulation. The active symbol set for printing depends on the selected **LaserJet Emulation**.

To select the default **Typeface**, choose the **Font Number** (0 … 128), **Pitch** (0.44 … 99.99) and **Point Size** (4.0 … 999.75) and select a **Symbol Set** from the pull-down menu. The **Typeface** settings are basically used to print text-only files in PCL mode.

The **Form Length** determines the number of lines of text per page, a valid entry must be between 5 and 128 lines.

I/O Time-out is the maximum time the SC7000 waits for additional PCL data. A valid **I/O Time-out** is between 5 and 300 seconds. After the specified time, the SC7000 aborts the print job and prints the last transmitted page of the document which may be incomplete.

6.2.5.4 The Maintenance Menu

The **Maintenance** menu of the SC7000 utility should be used with extreme care. It allows the SC7000 to be reset to the condition at the time of shipment from the factory.

Initialize Disk from the **Maintenance** menu initializes the hard disk of the SC7000 and restores all data on the hard disk to the initial state when shipped from the factory. All changes made by users including downloaded fonts will be permanently lost. The hard disk will be initialized during the next restart of the SC7000.

If non-roman, e.g. Japanese fonts are installed (SC7000J only), it is most important to uninstall these fonts using the installer program included in the font package before initializing the disk. Most non-roman fonts are copy protected and cannot be reinstalled otherwise. Make sure to follow the instructions included in your font package.

Restore Factory Defaults from the **Maintenance** menu resets all settings of the SC7000 to their factory defaults. This includes all parameters which may be changed by means of the SC7000 utility. The SC7000 automatically restarts when restoring the factory defaults. Therefore, fonts in memory will be deleted but fonts downloaded to the printer's disk will not be affected.

6.2.5.5 The Help Menu

Choose **Help** from the **?** menu to get online help for any of the menu items. **About SC7000 Utility** from the **?** menu will display the version number of the SC7000 utility.

6.3 MS-DOS

6.3.1 SC7000 Utility

The SC7000 utility for MS-DOS closely resembles the SC7000 utility for Microsoft Windows.

The user interface of the SC7000 utility for MS-DOS can be controlled by keyboard and mouse (optional). In the latter case a suitable mouse driver must be loaded on your MS-DOS computer.

When using the keyboard, hold down the **<ALT>** key and press the highlighted letter of the menu name to enter the menu. Press **F** while holding **<ALT>** to enter the **File** menu, for example. Use the arrow keys to highlight a menu item and press **<ENTER>** to select the highlighted item.

Once you have entered a dialog box, use the **<TAB>** key to select a value to edit.

Alternatively, click the mouse to select menus and menu items.

The SC7000 utility for MS-DOS provides the same menus **File**, **Print**, **Setup** and **Maintenance**, but does not provide the **Info** menu. The Info menu is equivalent to the **?** menu in the Windows version.

Each menu also provides functions equivalent to Windows with a few exceptions.

The **File** menu offers **Select Port** instead of **Select Printer** to select the port where the SC7000 is connected to.

Furthermore, the **File** menu offers **Download Font** instead of **Manage Fonts**.

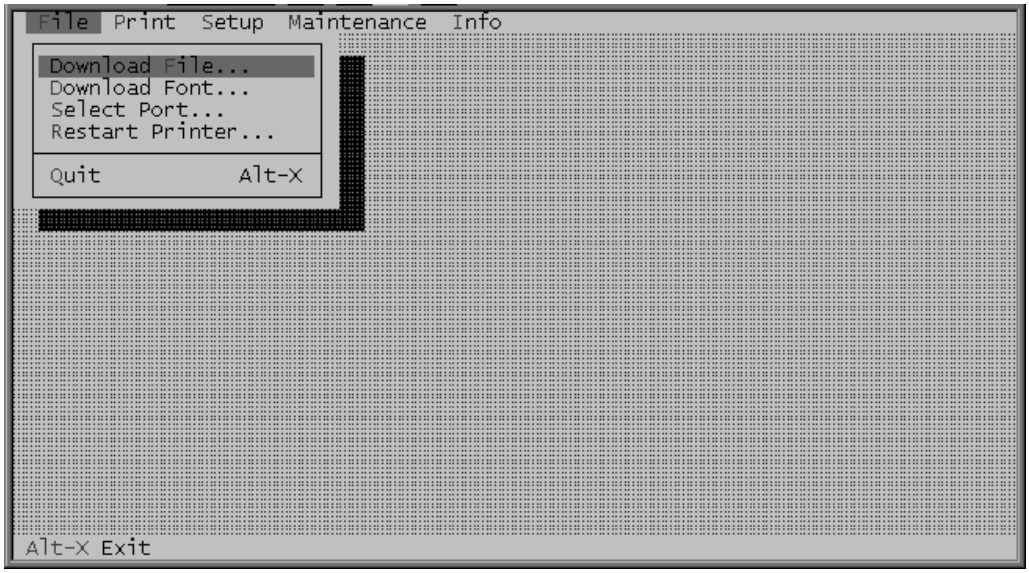

Figure 6.56: File Menu (MS-DOS)

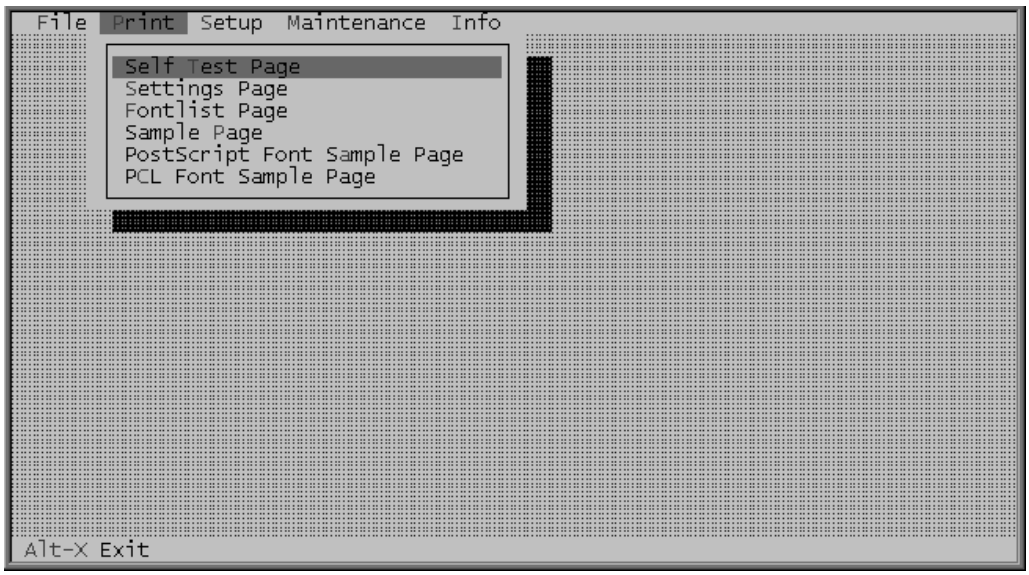

Figure 6.57: Print Menu (MS-DOS)

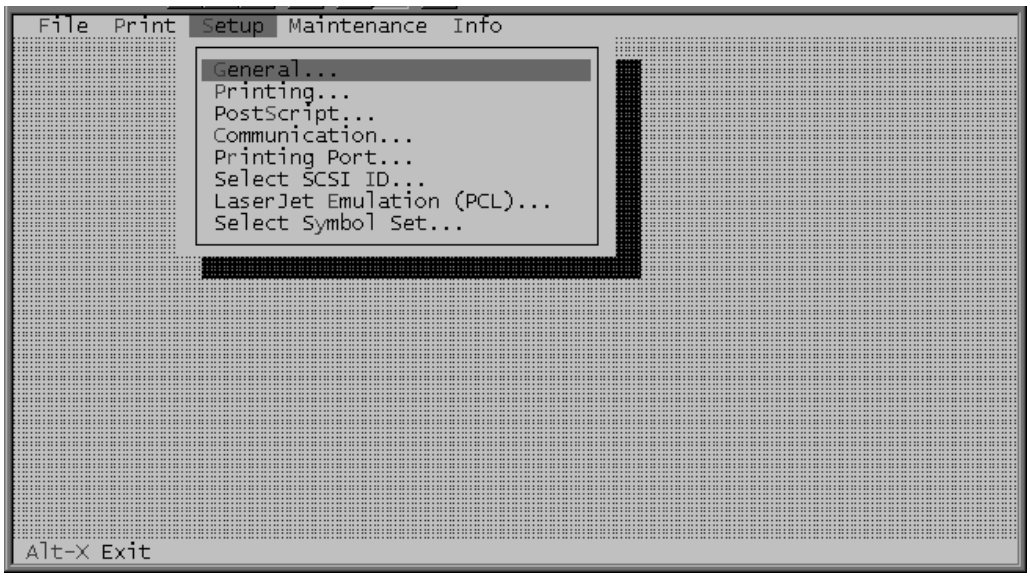

Figure 6.58: Setup Menu (MS-DOS)

Figure 6.59: Maintenance Menu (MS-DOS)

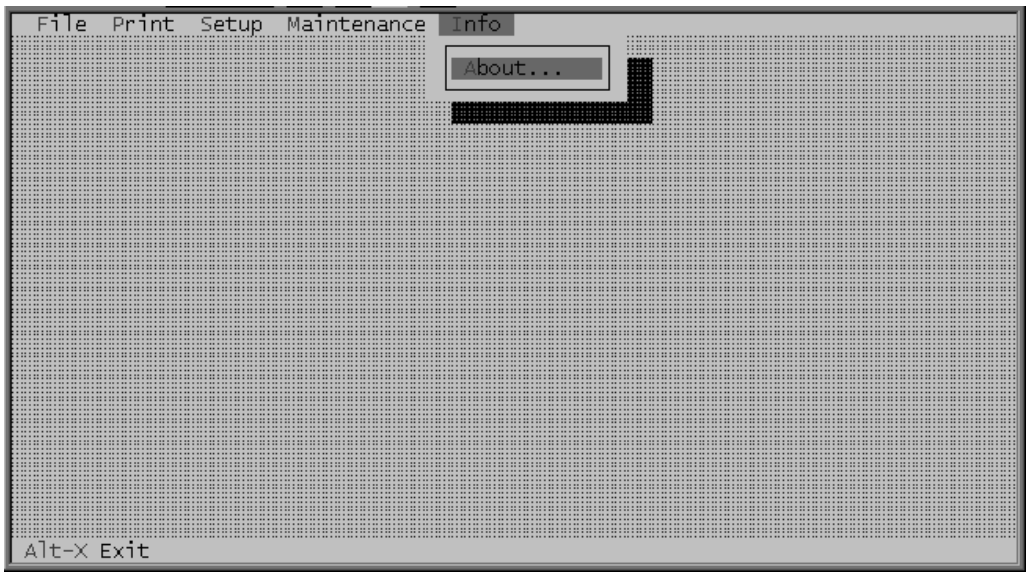

Figure 6.60: Info Menu (MS-DOS)

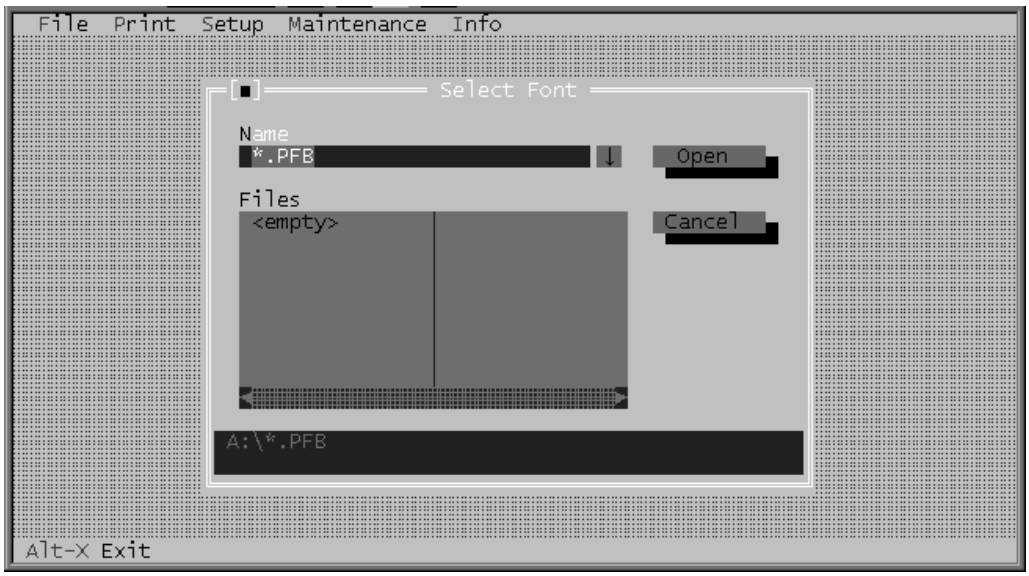

Figure 6.61: Download Font (MS-DOS)

Select **Download Font** from the **File** menu to download a font to the SC7000. Choose one of the download destinations **Memory** or **Disk**. Select a font from the list of available fonts and click **Download** to start downloading the font.

The **Setup** menu offers **Printing Port** and **Select SCSI ID** derived from **Communication** for item selection.

Please refer to the description of the SC7000 Utility for Windows above to learn about other menu items.

Figure 6.62: Printing Port (MS-DOS)

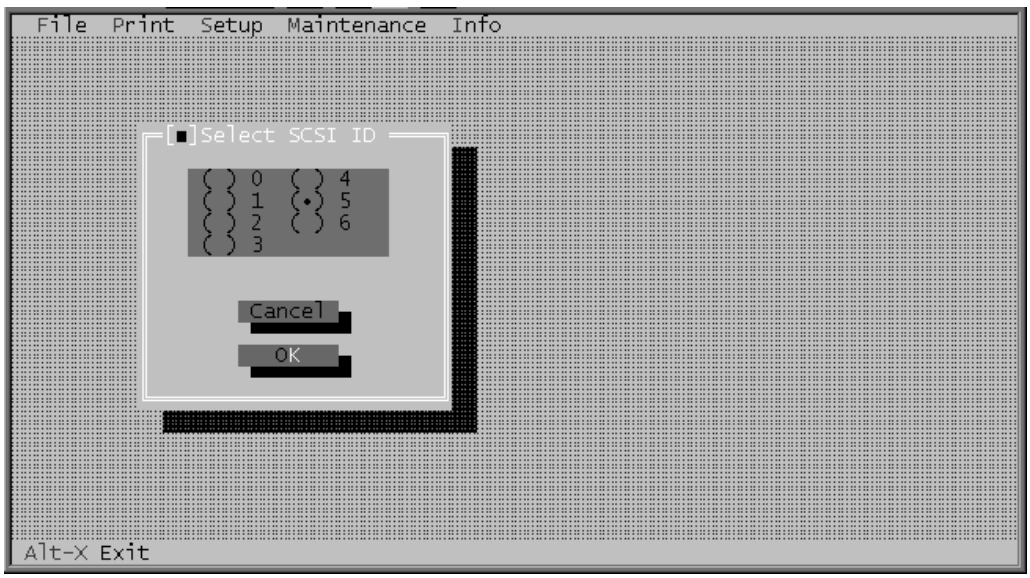

Figure 6.63: Select SCSI ID (MS-DOS)